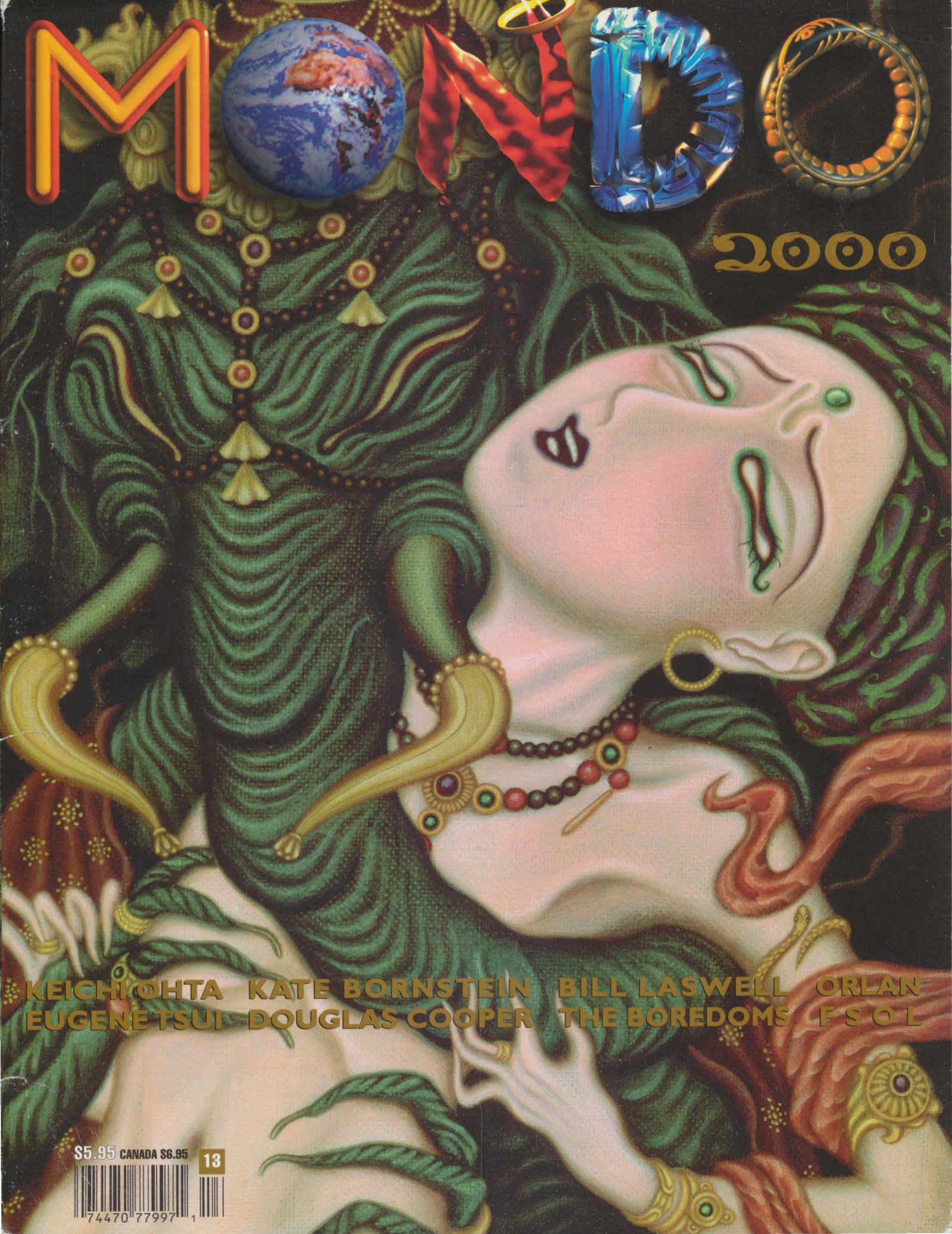
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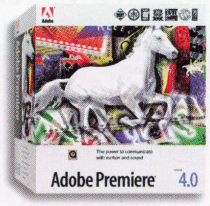

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M2K|C

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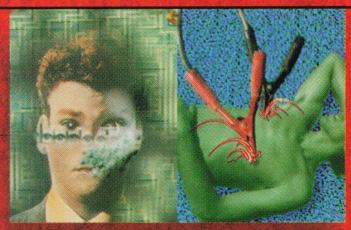
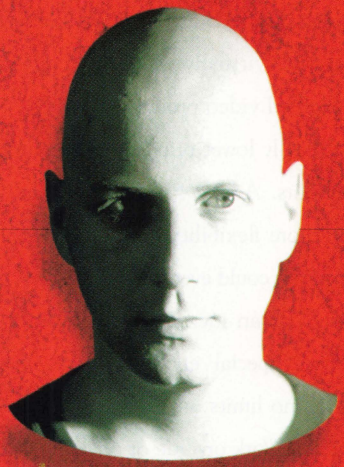
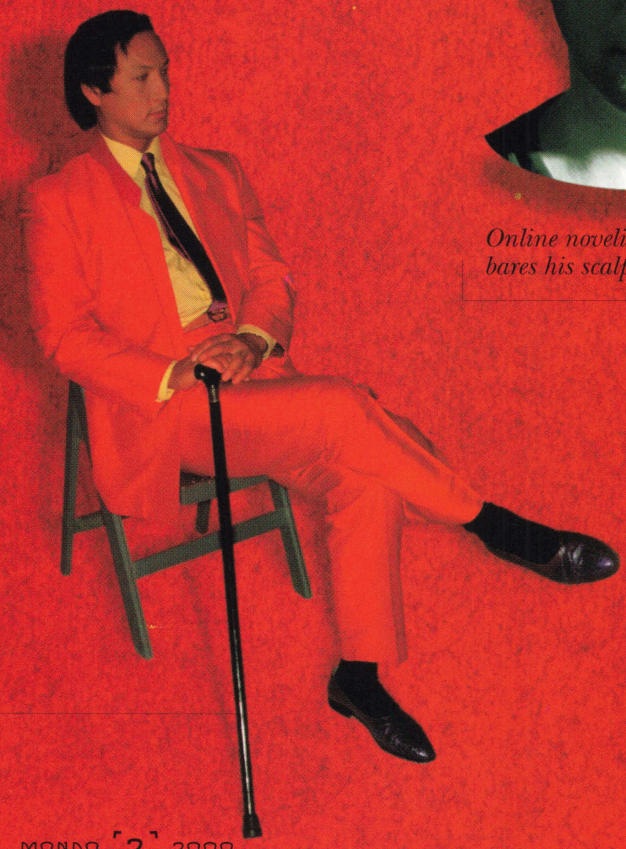




Online novelist Douglas Cooper bares his scalp to David Kushner



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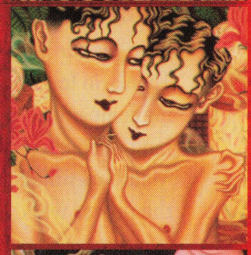

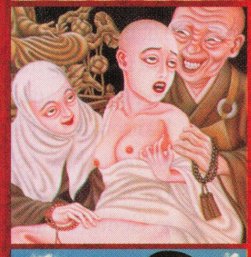

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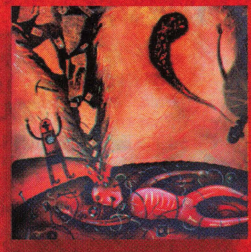

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BRUTISH GRATITUDE

We're so cybergrateful to so many who directly or indirectly make our MONDO delightful. We're gonna thank a bunch of them now, so rise up and drop to your knees, and please give a rousing hand to the people you see before you:

Thanks to **Tulip** Publishing and especially **Mario Assadi** for the high-res scans and film output; Thanks to **Scott LaBerge** and everyone at **Quad Graphics** for giving us our look and feel—and to Quad's pressmen who catch our typos *before* we go on press.

Also thanks to **Hayes** for the Optima 28.8 modems; **SuperMac** for all that equipment we like so much we haven't returned; **Microtek** for the ScanMaker 45t, which we even used to scan our cover.

And now some very personal gratitude: Thanks to **Lynda Weinman** for bringing me up to speed on Photoshop 3.0 and turning me on to **D.B. Coopers;** a very cool music store in L.A., [Bart, don't forget **Lior Saar** who drove me around until his car inexplicably burnt to the ground in front of the MONDO house], Thanks to **Jon Hassell** for sending me his new CD *Dressing for Pleasure* which kept me company in the wee hours, thanks to **Belladonna** for deejaying the large hours, [and of course **Karl O'Melay**, despite the long distance phone bills], thanks to **Matt Groening** for playing *Esquivel* for me, and to Matt's lovely wife **Deborah** for the power walk, [oh, and **Howie Brodnstien** for the Schizandra], Thanks to everyone who was involved at the dear departed **Center for Creative Imaging**, Thanks to **Fred Dodsworth** who introduced me to Queen Mu, thanks to **Queen Mu** for hiring me and trusting me with a large blank canvas, thanks to **Eric White**, **Stephanie Rausser**, **Jordin Isip**, **Jill Greenberg** & **Khyal Braun**. [Thanks **Mykle Hansen**, **Isaac Feldman** & **Ladd McPartland**] Thanks to **Kai Krause** and **Kristen Keyes** at HSC software (what's with all those double "K"s anyway?), Thanks to **Dave Eggers** at **Might** magazine he's a damn nice fella, Thanks and best wishes to **Georgia Rucker** as she heads off for NYC. Hello to **G9** and **Dashiel**. Buy the new book *Schoolgirls* by **Peggy Orenstein** and as always, Thanks to **Heide Foley**, without whom there would be no organization—just stop inter [no] rupting me.

—Bart Nagel & Heide Foley

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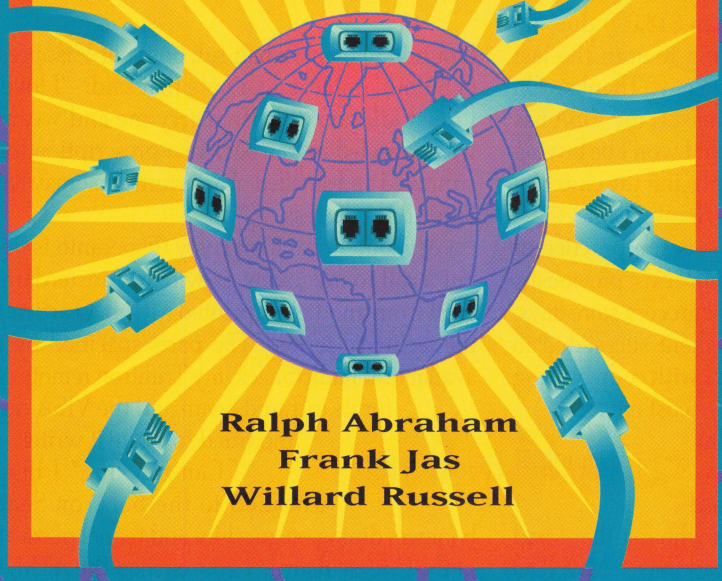

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IS THAT UIC?

by Bart Nagel™

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I am cute and pretty - and vice versa
I am cute and pretty - and vice versa
I am cute and pretty - and vice versa
I am cute and pretty - and vice versa
I am cute and pretty - and vice versa
I am cute and pretty - and vice versa
I am cute and pretty - and vice versa

An example of a UIC glitch on last issue's cover. The normally invisible UIC code serendipitously generated visual interference as readable text when scanned with a UIC disabled scanner. This example was submitted by Andreas of Cyprus—who should know better than to scan my photos.

I guess you all caught the brouhaha over the Universal Image Code in the last issue. It's that DNA-like computer code imbedded in an image on a "nano" level and detectable by a proprietary technology currently included in desktop scanners, fax machines, and digital still and video cameras. Credits to my VISA account in the last three months have totalled more than $18,000 due, no doubt to many of you young hooligans trying to scan the last MONDO cover invisibly protected by UIC technology. **Thanks**. On the downside, is that because of rampant *codepranking* my VISA has been debited to the tune of $16,750 meaning that I won't be buying a red Nissan Sentra GXE. Rather, I will be replacing the clutch in my still quite serviceable '78 Honda Accord. Thanks-a-lot.

Codepranking—for the jargon impaired—is the practice of swapping codes or applying them where they didn't exist previously, much like switching price tags in the pre-scanner grocery store days. Adherents of the pernicious dUdü art movement succeeded in infiltrating several of my location photo shoots with code bearing jeans, sweaters, and matching jackets, that have cost me an extra few thousand dollars when I had my film scanned in the popular Pro PhotoCD format.

Now 98% Fractal Free!

There was a general shriek of protest in regard to my **Fare Use** article from MONDO readers who felt that I had contradicted my earlier position on Appropriation (see MONDO 2000 issue 10) in favor of a rabid don't-infringe-on-my-copyright-dude stance. I guess I have some explaining to do, because yes, I have done a complete about-face in my philosophy on ownership. It began, as so many conversions do, when my emotional state was taking an enormous nose dive. I was godless, loveless, shirtless and listless—not that I had anything to put on a list, but you get my drift. My mutual funds began a severe downward slide in the second quarter. I was panhandling in the streets of Berkeley (I blended into the crowd.) "Desperado" was the word—I tried it on and it fit snugly. Finally, remembering an article on ATM hacking that appeared in MONDO's premier issue, I snuck into the MONDO 2000 archives. The original schematics for building an infrared blinding device and instructions (in Dutch) for counterfeiting an ATM card were never printed with the article, but I knew they existed in the darker recesses of R.U. Sirius's old office, probably under a pile of empty Vasopressin bottles and moldy remnants of Buffalo chicken wings. I found the plans, a half full bottle of Vasopressin, a 200 mg tablet of Sulbutiamine, and a note that said: "I love you R.U. therefore I must kill you. Please marry me and wear this hat." The note was scrawled on the back of a prescription for imiprimine, it was crumpled and smelled of a perfume that may have had an expiration date. But I digress.

My Dutch was a bit rusty (Esperanto is my second language), but a call to my lovely ex-wife in Amsterdam (using a blue box I built from another unprinted MONDO article) cleared-up most of the technical terms. The parts specified by the schematic were available at Radio Shack, my Trinitron remote control was sacrificed for its infrared beam and the VISA card reader was easily modified to make it write.

"I Can Hacking" I thought to myself as I headed to the BofA on Shattuck, passing the boomers dining on zucchini and fennel pizza at the sidewalk tables of the Cheese Board. I approached the ATM, wearing the Virtual Vision glasses Chris Hudak had lost in Queen Mu's red velvet sofa at MONDO's Halloween party. These now contained the infrared light that would blind the electronic teller's video camera and obscure my identity.

I withdrew $300 from some poor schmuck's account. I knew the bank would cover it—after all, hadn't they appropriated at least that amount in NSF charges on my checking account in the last year, and what about all the money they'd been saving by reducing their roster of full time employees in favor of part time-no benefits-minimum wage-college students-who could give a shit-tellers? I'm sorry, I'm ranting aren't I?

I handed a fat twenty to the babbling Berkeley veteran collecting change for the Food Bank. It was at this moment—actually just down the sidewalk from this moment—when the epiphany began. It started with a keenly brilliant fractal fog—a photoshop filter gone bad—a miasma attack to be sure. It included a 16 bit digital audio

ambient soundtrack that had all its samples cleared. There was a trumpet solo by Jon Hassell, a wrestling match with Akbar and Jeff vs. Mr. T, and directed by Tom Stern. From this emerged an angel with a copyright symbol for a halo and a conventioneers badge that said "Babs." She spoke... but I heard nothing. Finally she tacked a post-it-note on my head that said, "Mr. Nagel, *we* think you belong in jail."

At last, a sign from God. Time to reflect, time to repent, time to reinvent myself, time to use the word "reinvent" like a pop culture critic. So, God had spoken to me, through an angel—well, through a low-tack 3M office product, and the message was: "Stealing is bad, and—oh, by the way, *appropriation is stealing*. You don't have to give the money back (because really you're just taking money from the devil) but STOP SCANNING OTHER PEOPLE'S PHOTOS."

Slowly the clouds they did swirl, they moved rapidly across the sky like a Lexus commercial, the beautiful angel began to ascend, I hoped I would see her again—perhaps over cocktails at the Algonquin Hotel bar—we would laugh and tell stories about George S. Kaufman and Groucho and I would ask her if she noticed that the gorilla in *A Day at the Circus* got smaller towards the end of the film. We would marry and maintain separate residences.

And thus, did I revise my life—shorn, shriven and redeemed by love. My transgressions are behind me and I've paid my debt to society (including two weeks community service for touching the private parts of my inner child). I am now approaching life with a zest heretofore reserved only for a Beatles reunion. M2

When I was big bad body-snatcher. I would put my polaroid SX-70 head on the appropriated bodies of others without permission. Even the background came from another. [This is an *example* of appropriation and not the actual wanton *act* of copyright infringement.]

Since I have recanted. I only put my polaroid SX-70 head on the appropriated bodies of others with express written permission. The fabulous body of Felicia R. was photographed by Hal Martin Fogel.

Dear Bart,
Greetings from Peter and myself from Coil, here at the Threshold House, the place where the Eskaton begins.

The article re. graphic encryption and copyrighting really freaked me out. Is it for real? It's one thing to protect specific, recognizable and whole images. Mapplethorpe photographs etc. It's fine to be defensive and protective when an image has been appropriated...stolen... and then re-used for someone else's gain. Be it money, artistic credit or voodoo. But to encode and claim ownership of each and every molecule or recognizable fragment of an image is surely MADNESS. Who really can claim to own an image? A reproduction of one frozen moment in time and place. Reality has already been splintered. We are all drenched in the liquid speed of information exchange. The image IS reality. It has replaced the EXPERIENCE as the touchstone around which and upon which we base our concept of what events go towards creating the illusion of normality... reality. The concept of intellectual property was bad enough. Anyone who is sensitive and creative will recognise that ideas are fractal, co-owned... often appearing simultaneously... ideas breed and feed off of themselves. Burroughs' old "Language is a virus" is so obviously correct, with precise and widespread implications. To encode ownership of fragments of images will be a devilish tactic that will lead us all into vast fresh fields of litigation, countless, endless, senseless variations on a horrible new theme. Why? Why do any of this? Where has the spirit of Dada, WSB and cut-ups, maverick anti-copyright pioneers etc., gone? It will close down creativities, people will be fearful of publishing or will become unwitting criminals by innocent reproduction of images or fragments of images that have been circulating around for aeons. There will be a big Battle of the Fragments. How small a splinter of an image will these ideas and rules apply to? It could get microscopic, holographic, in theory. What if some creative well-meaning artist STOLE the cover image of Heide's eyes, put them into a MAC and created a stunning eye/flower tree type hybrid. What to do then? IF I have comprehended the concept full and correctly, then it is MONSTROUS and RETRO. Historic images could be copyrighted, digitized and marketforced into monstrous mental shapes. People will lay claim to specific memories of places and events that exist only through images that they will now own. HIS STORY will be sold to those in the future.

On re-reading your piece, maybe it's spozed to be ironic. Duh, I bought it!
John Balance

Heide,
Bart's Fare Use © was a hoot! I laughed so hard my face fell off. A lot of my photo colleagues flew into a tizzy and began a letter writing campaign, you mind hackers.
Best,
Douglas Winter

For the attention of Queen Mu or R. U. Sirius or whoever else opens up this letter at MONDO,
Just when I thought there was nothing left to relieve the tedium of days and nights spent in the rain-soaked climate of prehistoric England. The enigma, or should that be enema?, of MONDO 2000 came along and blew out an misconceptions I had of ever consigning my fate to these sunny shores. With trepidation I investigated further to see if the myth I had heard of in a Comic shop in Notting Hill London could indeed deliver some much needed guidance towards the new edge.

From within our small fraternity, a bunch of hard core disciples have formed who devour MONDO at every sitting. In issue 12 there was an exquisite feature on Theo Kamecke's sculptural objects which in my dreams look for all the world like long unseen idealized Aztec temples, and the fashion was an interesting juxtaposition.

Which brings me to what we can do for you...There is a group of people at St. Martin's in London, which is one of the last independent art schools in Europe, who not only understand MONDO but have been living it for four years. Primarily many have been trained to be fashion designers but rather than immerse themselves in the desired big business approach to fashion, they have followed their own paths to produce for example exquisite carved rubber pink dresses cross-stitched with surgical thread based on plastic surgery, to garments with in-built gadgets and new fabric technology that the fashion industry will never take on board.

We are looking for a vehicle for our designs, illustrations and writing. Why not ask us to compose a spread for you or set us a brief? We have all the facilities available to us to do it and can supply brilliant make-up and styling.

Across the many miles we are with you in spirit.
Wendy Brierley,
Winchester, England.
[We took her up on her offer. For results see page 16—eds.]

Subject: Article—Xandor Speaks
I'm very interested in the article by Xandor Speaks. "Stick 'ems..." I was

Bart Nagel

thinking about communication with microwave technology. It will change the way of communication. In the article there are section which is mentioning about mind-control technologies with microwave. I think some governments are already using those method. It may not be true but they spread micro wave net all over the world except in middle of Africa. They can scan anybody's brain. They can talk to anyone's brain directly. There is no privacy in this world anymore. (If it was true!) Compared to these advanced technologies, information highway is just like kid's talk. This is kind of scary but interesting, think about the possibilities. There will be no telephone, no fax, even no monitor, no camera. You will be able to see through someone's eye's. You will be able to record your dreams on hard disk and play back after you wake up! You can rewind your dream! etc

Hiroshi Iguchi
Hiroshi_Iguchi@morph.com

My Good Friends,

I thought that I would write you an update on the letter that I wrote you about your article, "Pirate Media" that discussed my radio station that I had been broadcasting on for over two years. KQRP FM 96.3 in Wasilla, Alaska.

Shortly after I wrote you the letter about your mistakes in that article, I received a letter from the FCC (Federal Communications Commission) stating that I was to cease all operations on the frequency of 96.3 MHz in the standard FM broadcasting band. It said that if I did not cease all transmissions that there was a possibility that I might be fined up to $5000 and/or be imprisoned for up to one year in jail for my offense.

I regret to say that since I am only seventeen years old and still a minor, that meant that my parents were liable for any illegal actions that I may be taking. So, after a face-to-face meeting and inspection of my transmitting equipment with the FCC Alaska Engineer-In-Charge, I went home and proceeded to dismantle KQRP, put it in boxes, and place it in my closet. Out of site, but not out of mind. Please note that I said in my closet, not in my closet for good.

Ever since I went off the air in March of 1994, people have been restless in my community. My friends see the need for America as a whole to take a stand against government excess. It may be true that since none of my equipment was confiscated, that this was just a warning from the FCC, no real harm was done. But what I see here takes on more dimensions than just a case of pirating. This just doesn't

concern me, but it concerns every one of the people that claim to be citizens of the United States.

What I see here is a slow but sure erosion of our rights as free citizens. Not only do "they" want to tell us what kind of health care to have now, but they want to tell us how many children to have, how old we have to be to drink (but yet we can still go off to war at 18 and die for our country, but not drink until age 21. Make good sense, huh? (Think about it.) And now they want to tell us that a spectrum that no one can see or feel but only hear is regulated to the hilt. As far as the average U.S. Citizen is concerned, they have no access to the airwaves unless they have 50K and more in liquid assets to hand over to the government without question.

When I was shut down by the FCC, I began to experience feelings that I had never felt before. I finally recognized them as the feelings that people in France back in the sixteenth century felt as they were being ruled by kings and queens. It was the feeling of oppression. I felt like I was underneath the foot of the government, and that I had to do what they said...or else. When you begin to feel this way in the United States, there really is something telling you that there is a serious problem with the way the government works today. So you see, it just isn't the FCC ruling the airwaves, but it is the whole federal government.

As of now, KQRP sits silent in pieces in my closet. I don't know if I ever will return to the airwaves. Maybe someday I will—when it is legal to say what you feel.

Be Seeing You, Number One,
Brett Cooper

MONDO,

For five years I have been the victim of a formal torture program at the hands of the CIA. The torture is electromagnetic and difficult to trace, retaliation for my political research on fascist political conspiracies, linking certain cliques in the military and federal government to cult formation, ritual abuse of children (the Firm has, since the early 60s, used cults to cover for mind control experimentation, including People's Temple, the SLA and the Finders), drug distribution, and the like.

All of this is to say that your article on the Pentagon's electronic weapons arsenal (MONDO #12) was appreciated by someone who knows first-hand their insidious potential. I hope the effect of the article is not mere titillation of violence-porn addicts, but alerts your readers to the awesome threat EM weapons pose to human rights and political opposition to CIA-DoD chaos and disinformation.

I have been subjected to a gruelling daily regimen of torture rendered from a remote source. I have been burned

Mark Leaman

by microwaves, kept awake for days at a stretch by shrieking noises in my ears, the effect of pulsed audiograms. One evening I was hit by an infra-sound attack (this diagnosis comes from the Association of National Security Alumni's Electronic Surveillance Project) on my spine, the most painful experience of my life. I was left crawling and screaming across the floor. I could go on cataloging the tortures I've endured. My example should serve to demonstrate that fascists do not need concentration camps to silence political dissent. One's own home can be transformed into a Nazi torture chamber.

For die-hard skeptics, I can offer proof: two of the country's leading child psychologists witnessed magnets repelled by my cranium. When I wrote a letter to Amnesty International about my plight (it was ignored), friends of mine were subjected to microwave attack.

Public interest groups monitoring federal abuses of mind control technology tell me that there are scores of others under assault. "Alien" abductions and ritual abuse have long served as covers for the development of electronic weapons. Addressing the *reality* of the government's mind control experimentation may lead to a public outcry against this carefully concealed attack on human rights.

So far the disinformationists (proponents of "false" memory and UFO Posners) have had a field day selling the rest of us out. Please continue to expose the national disgrace of EM weapons, and their sadistic use on unwitting human targets.

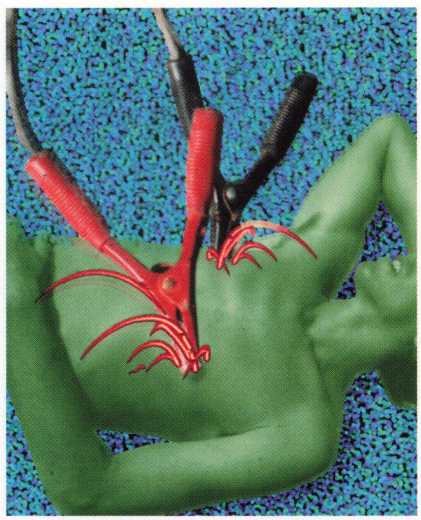
Regards,
Alex Constantine
Los Angeles

Dear MONDO,

I am writing you with information on a very important medical discovery which could have a revolutionary impact on the fight against HIV infection and AIDS.

Based on recent research at the Albert Einstein College of Medicine in New York we have developed an experimental/theoretical, non-invasive, non-pharmaceutical, in vivo method for the rapid neutralization of HIV virus in humans. Research shows that the HIV virus is sensitive to the application of minute electrical current (50 to 100 micro amperes). In the presence of such an electrical environment the outer protein layers of the HIV virus are altered sufficiently to prevent its subsequent attachment to receptor sites.

These findings suggest that two safe, simple, low-cost, and easy to build devices can be used to *externally* self-administer low-level electrical current to the blood



and lymph tissue respectively. The parts to build such devices are readily available and should cost no more than approximately $75 for both. The very slight and mild electrification of the blood and lymph tissues *does not kill* any viruses or harm normal blood cells. Instead the process interferes with the ability of the virus to complete its life cycle by attaching itself to human receptor sites.

The blood neutralization device is used by attaching electrodes at selected sites over arteries where the subject's veins and arteries are accessibly close to the surface. Using the pocket sized, battery-powered, blood clearing instrument approximately 8 to 20 minutes per day for three to four weeks should, in our opinion, effectively neutralize well over 95% of any indigenous HIV as well as any other electrosensitive viruses in the blood. These other viruses may include Epstein Barr, hepatitis, and herpes B.

The other component of this self-administered treatment involves the neutralization of latent/germinating HIV reservoirs in the body's lymph tissue. This is accomplished using a second easily constructed device designed to deliver a very high intensity short duration magnetic pulse of greater than 35 joules. A simple strobe such as used in electronic camera flash units may be modified to discharge through an applicator coil held at body points over lymph nodes and other possible internal sites of infection. Several pulses repeated at each site may insure a reliable "overkill" for succesful HIV neutralization.

Both of these devices are considered safe to use, *however,* consult with your licensed medical practitioner before use as some restrictions may apply as to who should use such therapy and where on the body it should be administered. Users of cardiac pacemakers and pregnant women should not use these devices.

This self-administered approach to health is a "heresy" in today's society where we're conditioned to look for answers only to a medical establishment that has no current knowledge remotely promising "cures" for numerous well known terminal deseases. Further, apparent suppression of the consequences of this research by medical and pharmaceutical cartels means that to avoid entanglement with FDA and legal constraints forbidding use of the word "cures" this information is offered as purely theoretical and hypothetical.

Use of these devices appears legal and exempt from FDA regulations when you construct them yourself for research and/or use in your own practice. But double-check your local, county and state regulations for possible exceptions.

If you follow the instructions precisely, you may be HIV free next month, safely and surely.

Robert C Beck, D.Sc.

Anne Kirby Alvarez

Subject: Re Universal Image Coding

(The real message follows—the other is a defective simulacrum)

I83 have79 developed32 a89 method79 for85 including32 nearly70 indetectible79 copyright85 protection78 in68 text32 files77, analogous69 to45 the45 Universal66 Image73 Code71 described32 in68 the69 last65 issue76 of45 Mondo45. I83 can79 not32 describe89 the79 details85 of32 the70 system79 until85 it78 is68 protected32 by77 patent69 but45, believe45 it66 or73 not73, this32 very68 letter69 contains65 copyright76 protection45 that45 can83 be79 decoded32 in89 any79 copy85 of32 it70, whether79 the85 copy78 be68 xerographically32 or77 pure69 data45.

Ephraim Cohen

Dear MONDO,

You must forgive the snailmail this is coming in and also the crayon—I'm stuck here without access to the Netwerk; what to do? It was revoked.

Just wanted to drop u people a note on how you are cleaning up my money—but it's worth it. Loved the Neil Gaiman thingy and the rest of it. Wired has hit! Yew even here; a bunch of riders trying to reinvent the 'phone ha ha.

Wait—let me try to find a pen. There. That better? I've been wondering where the rest of the crew is. Where is Hudak? Where is um, everyone else? Andrew Hultkrans?

OK, OK, while I'm holed up here I might as well say something about it. The NWO—how long more? Defenses do break down without use after a while; can anyone help? Who *is* behind it? The bankers? The gray aliens? I say it's the orthodox groups, not necessarily the right-wingers, and not that I'm immersing myself in doubt, but when you do think about it aren't all groups orthodox when you think about it? Aren't they?

Has anyone received a copy of Random Notes and does anyone know what to do with it? I have a friend who got it through e-mail and she passed it along to me. I told her I knew what it was saying but now she's skeptical and really suspicious (sorry!) and I am supposed to prove that all of it isn't just created by a bunch of people filled w/disenchantment working at their McJobs, or so she says. Either way, we can't always differentiate the good from the bad.

Recalling Matt Haber's worries about the brain implants of the future (#10) people must understand that the Establishment does actually do it. It is being used now; slowly, slowly,

Holly Lee

the Establishment is taking control over us, their only purpose (or are there more?) being to reinflate their endless egos by comparing notes on "how many brains I control".

Example: Look where I come from. I don't need to explain the Michael Peter Fay case. All in favour, raise your hands, all not—aw hell. Like it matters! The Fay case is a classic eg. of how the Establishment uses fear to propagate "moral values" conveniently cutting off whatever survival instincts our minds have carefully cultured over the years of realization.

Where I come from, I can't speak out. So maybe the CEOs of the future may come from S'pore, as Neal Stephenson says. I can't help but worry about how the place is going to fare once the next generation—the one before mine—takes over. They are the ones with the egos—the Boomers. How can we tell if they're all working for the good of "everyone?" Can anyone honestly tell me if we do anything without wanting anything in return? Yes? How about "self-satisfaction", little à la smart drugs jolts to the mental ego which leaves people felling happy about it?

The Singapore public got full Internet access, 7/1/94, and normally I would applaud that as a link-up to the rest of the (de)generation for us all to enjoy the sweet mind drugs before we all get knocked off. What does the Establishment do? Tell us (nicely, ahem) that they will cut off access for those who download or access "undesirable information."

The Establishment can only repress us and push out faces in the mud for only so long. But we can't spend all our time on this—the NWO is coming (read: here) and I gotta go polish the weapons, stoned, of course.

Please can I get responses before we all (us, holed up here) die? The Establishment is on to our trail and there is a limit to the number of places we can hide. Fight it, you'd say, but put yourselves in my shoes and see if it's that easy.

Print my name if you have to—I'll probably be caught by then.

Last words (but watch your tail),

Evelyn Ng

P.S. MONDO *preventing us from appropriating (?!). Now* that's *a first!*

Subject: Court Action on FCC Fines

A federal court has rejected the FCC's revised method of assessing fines against broadcast, cable and telephone company licensees who violate commission rules. This legal finding could also impact the agency's ablility to enforce the Part 97 Amateur Service Regulations.

By way of background, in 1991, the FCC abandoned its longstanding case-by-case approach to assessing

fines against licensees who violate the Communications Act. In its place, the agency agreed to set "Base Forfeiture Amounts" of fines for offenses in most of the services that it oversees including those encompassing personal communications activities.

The court went so far as to say that the agency knowingly failed to give all interested parties the opportunity to comment on the policy change before it was adopted. This gives the FCC only three possible options. It can appeal the Circuit Court findings to the United States Supreme Court seeking a reversal of the lower court decision. It can revert to its pre-1991 monetary forfeiture schedule and issue a Notice of Proposed Rule Making on a new schedule of fines. Or it can abandon all regulatory enforcement of the rules it creates and place the burden for disciplining communications regulatory violators on a government agency with investigatory and prosecutorial power such as the Department of Justice.

The bottom line appears to be this. The FCC may now be reluctant to assess fines for any but the most egregious regulatory violations. This is because court decisions in matters of communications made on constitutional ground are normally considered relevant and enforceable in all commission governed services including Personal Communications.

Jim Grubs, W8GRT

Subject: herbal.letter

Let's change the concept of being high. Not just an extension of the old "I'm high on life" but a real perception that deliriously healthy is a state far beyond the notion of a short term mood alteration. Forget that morning-after "bug on the windshield/roadkill" feeling. You deserve to be golden in the first moments of your day and without the fear of whiplash that so often accompanies the use of substances. Keith Richards aside, sooner or later drugs catch up. For those who embark on that dragon-journey of mind and pleasure as well as those of us who remain tethered, here is a little offering, a sidebar if you will.

It is a well known fact that chemicals that elevate our consciousness may also deplete our chemical stores of the very substances that are needed to maintain that elevation. We are therefore constantly replenishing a pool in order to drain it. It needn't be this way. The substances that produce the best "highs" do so for longer periods of time and build your system rather than promote decay. Most of them do so by relieving stress. This elimination of stress produces

SCHIZANDRA CHINENSIS

the conditions necessary for a truly perfect high, not an episodic crash and burn but an early morning "God, I love this life" kind of affair. Too good to be true? Read on.

Schizandra—
Favored above all other herbs by the Empresses of China for it's rejuvenating powers, these small dark red berries were used not only as a preservation to their beauty but also as a sexual tonic for men and women alike. Schizandra is known to cause excitement to the female genitalia and increase the stamina of men. Associated with the 5 elements of Chinese medicine they are known as "5 flavor berries" in China. They do taste strangely bitter yet numbing also a bit salty and there is a strange sweetness to them difficult to categorize. They *are* tart. The berries are listed as an antitussive, tonic, stimulant, sedative and nutritive as well. It truly is a food, protecting the liver, lungs, nourishing the kidneys and releasing "False Fire" which is called Wu-Wei-Txu in Chinese and is associated with anger and neck and shoulder tension. Schizandra is used in many ways and is an aid to the memory both long and short-term. Customarily taken over a period of 100 days it is an excellent blood purifier. Aside from it's functions as a nutritive, a sexual herb and its fame for preserving youth, Schizandra is a wonderful stimulant and is used to great effect as an adjunct to mild drugs such as Cannabis. 25 of the small berries held in the mouth (five at a time) and swallowed seem to enhance the effects of Marijuana, requiring fewer and smaller doses to achieve the expected goal. In fact the use of Schizandra seems to create a synergistic relationship with just about any food or substance. The berries alone stand quite well as an experience worth trying. Many people report a sudden awareness of the flow of Chi about their body and a gentle yet pleasurable stimulation.

Being both a Yin and Yang tonic, it is no surprise that Schizandra is quite beneficial to the love art. The alcohol extract or tincture of Schizandra has the opposite effect from the berries eaten raw or made as tea. One is a stimulant and the other a sedative. Schizandra can be found in varying amounts in health food supplements, unfortunately most of them also contain Ma Huang <Chinese Ephedra> and/or Guarana both of which should only be taken for short periods of time and either contain caffeine or mimic its effects. Ma Huang can also wreak havoc on one's nerves and blood pressure. One of the easiest ways to enjoy Schizandra is to use the dried berries as you would a lozenge. 20 to 30 berries reportedly do the trick for most people. A strong tea is also

Artwork by Myumi Terao from *Chinese Herbal Medicine* by Daniel P. Reid, Shambhala Publications, Inc., Boston, 1987.

a good way to enjoy them and in this way they may be combined with Astragalus and Ginseng, affecting a strong synergy.

Schizandra is just one of the "adaptogens" or substances which help the body resist stressful responses to situations. There are others such as Echinacea, Holy Basil, Gotu Kola and Reishi mushrooms. Since it is the complete lack of stressful responses (there are no "stressful" situations, just responses) that is equated with being "high"; I propose these herbs such as Ayuwascu, Mugwort, St. John's Wort, Kava Kava, Yohimbe, etc, while being more well known for their psychoactive properties are also not considered nutritive in nature and in fact are at times toxic, depending on use, and definitely not recommended for daily use. These psychoactive herbs can be used positively to great effect with the adaptogens listed above.

Schizandra berries and Royal Jelly are available from: Wildcrafters Barrow, Box 721, Healdsburg, CA 95448.

An elixir containing these herbs is available from: Columbines and Wizardry, Box 1553, Sisters, OR 97759. (503) 389-6348

Yours

John Bidleman

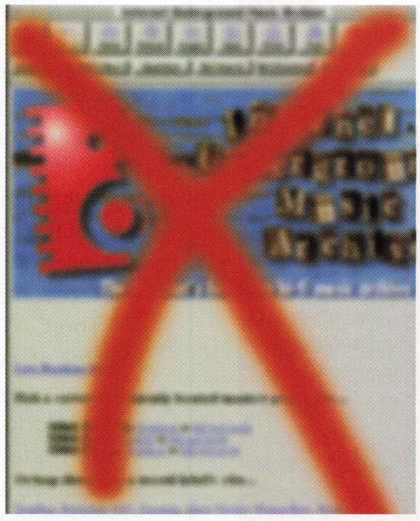
robbee@crl.com

[John Bidleman is an herbalist currently investigating herbs useful in inducing lucid dreaming and functions of the mind—eds.]

re internet "undergound" music archives/puff piece

Has anyone else logged on to IUMA's site lately? (It's not an "edu" anymore, incidentally—it's a "com.") did anyone notice that this supposedly "underground" music forum is now completely dominated by major labels and their artists? For that matter, your feature on IUMA in issue 12 *reeks* of corporate sponsorship. What appears to be a sidebar to the piece turns out to be (surprise!) an *advertisement* for Warner Brothers. The band that dominates the featured web page turns out to be a Warners signing. I don't have anything against this per se —except for the fact that you and IUMA are both guilty of spin control and deliberate misrepresentation.

IUMA has obviously been co-opted by the majors. This hardly surprises me –I've been around long enough to see corruption in every conceivable form. What really sickens me is the lads' cynical, mealy-mouthed insistence that they merely want to *contribute*—to *give back* to the culture that has *given them so much*. I'm not a college student—



I'm a battle scarred, 10-year veteran of the music business. I recognize this as what it is—having heard it from every lowlife sack of shit I've ever encountered —from the scummiest low-level promoter all the way up to the fat, bloated, seemingly indestructible A&R vultures who routinely ruin young band's careers, are fired, and bob up to the surface somewhere else to do it again. Simply put, it's bullshit. Furthermore, it's a corny line of old, tired bullshit! What these bright young men are doing is completely self-serving—they used a university's computer to buy themselves a job as high-tech shills for the mainstream, corporate music industry. They got to this position by clawing up the backs of young, unsigned, naive artists.

And you are helping them. How dare you sell an egalitarian, anti-establishment stance when you are only interested in making money and having safe, comfortable jobs while artists—REAL ARTISTS are suffering in obscurity. Unlike IUMA, I have no desire to see cyberspace become a "level playing field for the majors" (Warner's *already has* their own web page and a presence on AOL). The playing field is *not level*—it has been slanted in their favor long enough. MY label will help artists rise & destroy their oppressors—the bastards simply won't be needed anymore. Their endless supply of free drugs & blowjobs will dry up and they will go find jobs in a sector better suited to their talents—possibly sanitation or politics.

Sincerely,

Tristan

Wild Teenage Music Inc.

Subject: Bart Nagel's Article

The article _Fare_Use_,_Universal_Image_Coding_Process_Creativity_ by Bart Nagel was a masterpiece! To anyone following EES and Clipper, this was all too believable. BTW, has Bart ever heard of "steganography" (Available on the net as MandelSteg and GifExtract)? Uses low-order bits of .GIF files to encrypt messages.

Keep up the good work.

It would be way cool to post this article: (talk.crypto.politics,comp.org.eff.talk,alt.security.pgp, cypherpunks@toad.com)!! I hope you will consider this (I of course, will NOT do so w/o permission. Besides, I don't have a scanner ;))

Dave Otto

Dear MONDO,

We always thought the New World Order would come about under the bayonets of the U. S. military, heralded by screaming Patriot missiles. Who would have thought that it would anchor itself globally through nothing more than a stack of paper less than

CHOCOLATE AND CHEESE

16 new songs from Ween

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a foot tall? By the time you read this letter, the New World Order may have already been implemented, not with a bang but with a whimper from our elected representatives who already gave away their right to amend or even discuss in any detail a world trade agreement that will have the power to override any U. S. law or regulation that might present a "barrier to trade". As we go to press, at the beginning of November, the deadline for ratification has been set for January 1, 1995, just a couple of months from now.

The justification for the GATT is that it will increase world trade and that by increasing world trade economic growth will increase and that this way "we" will fight poverty and fight unemployment. This is not just a myth, it is a gigantic lie.

Since 1950 world trade has increased eleven times, that is 1100%. Poverty has increased massively throughout the world. Unemployment has never been higher. Spain, a subsidized member of the European Union has 24%, the same in Finland; in the U. S. we have the worst unemployment since the Depression.

What's the point of increasing world trade by 10%—as promised by GATT, when multiplied by 1100% it has done no more than increase misery, unemployment and unprecedented environmental destruction world wide.?

The GATT is above all, as has been described, a charter of rights for the multinational corporations. They already control the economic destiny of most Third World countries. They also control the bulk of world trade. Over 40% of world trade is not really trade at all, it is products shifted from one branch of a corporation to another branch of the same company. Globally only 3-400 transnational corporations control about 60 or 70% of world trade. And by removing all the barriers, all the constraints on their operations, all the barriers to their expansion, they are going to be able to control maybe 80 or 90% of world trade. We are handing the world on a platter to the multinational corporations.

The problems we experience today are caused by the "free market" system and unregulated trade. GATT will make this model legally binding for the whole world and it will make it unassailable. The most infamous provision of the GATT text is Article 16.4. It forces us to bring our local, state and federal laws into compliance with the new world court of trade, the World Trade Organization, based in Geneva, Switzerland.

There, in star chamber proceedings, three unelected trade bureaucrats will be empowered to second guess any labor, safe food or product safety law, any environmental regulation that might be a "barrier to trade". If found guilty, the U. S. would have to get rid of fuel efficiency

standards, of limits on raw log exports, of restrictions against Bovine Growth Hormones, of bans on DDT on food or risk having trade sanctions invoked against any U.S. product globally.

This is not an idle threat. We know about these potential challenges because they have already been compiled in a book put out by the Services of the European Commission entitled *Report on United States Barriers to Trade and Investment.*

One intriguing example is the new food safety standards. They were negotiated in secret in GATT's Codex Alimentarius. Seated on the commission were representatives from Coca Cola, DuPont, Monsanto, Nestle, Pepsi, and the dog food maker Ralston Purina. They determined that we could easily digest more pesticides and chemicals like DDT, Alar, Heptachlor, Lindane, Aldrin, etc. Truly shocking are the new rates for DDT they came up with, a deadly chemical that should not be allowed on any food at all. The new tolerances for DDT as compared to current US. standards will go up in:

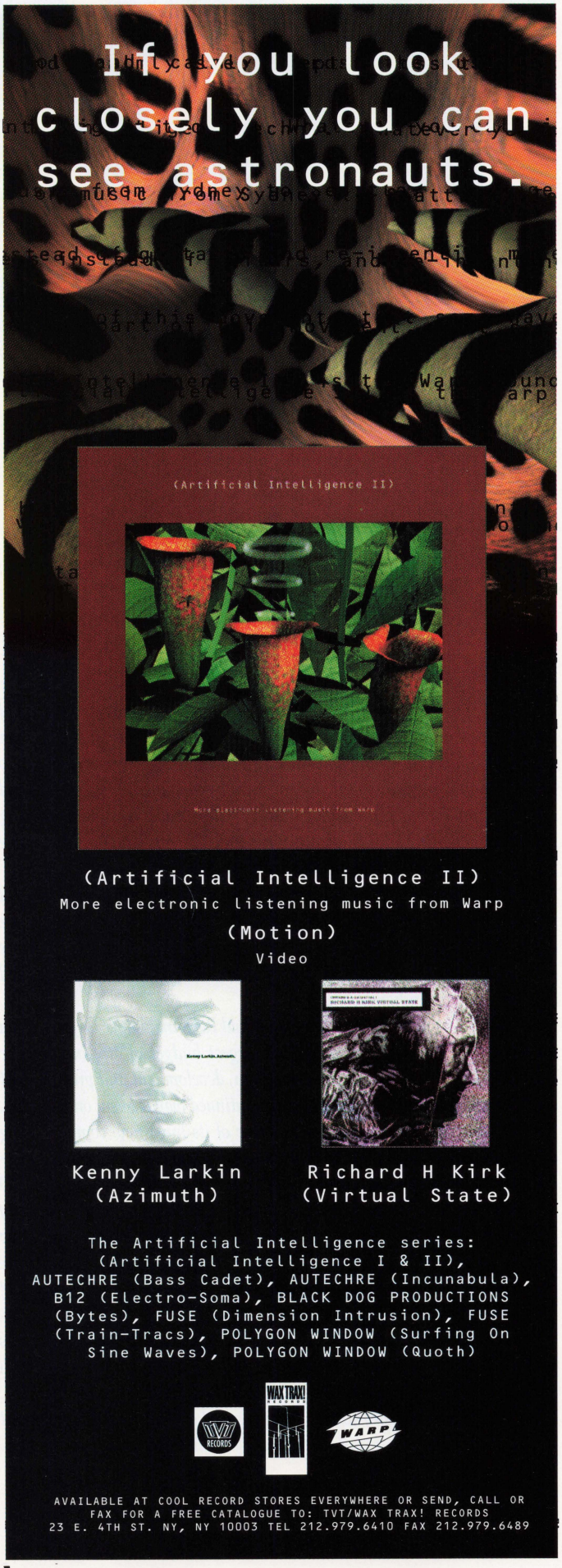
broccoli	by	3,300%
carrots	by	2,200%
strawberries	by	2,000%, etc.

Your and my death of cancer, once considered as something to be prevented absolutely, led to the Delaney clause that said no cancer causing agents are allowed under any conditions. This clause is now being challenged. The neo-conservative free trade ideology embedded in the GATT subjects your life and mine to a cost benefit analysis. The question now is: Is your death of cancer more or less important than the boost in the production of a certain vegetable made possible with increased use of DDT? Well, the dice have fallen and we lost: DDT on vegetables will go up under GATT. In the ratification process of the GATT, Congress has already abdicated its right to amend or change any part of the trade agreement.

The innocuous GATT, the obscure text that nobody knew existed, is about to turn into an instrument of real power over us in an economic sense and in a legal sense. Those among us who have wished for the demise of the state now have our dreams fulfilled. Global corporations, many of them more powerful in terms of economic strength than most states, have shopped for and purchased the parliamentary bodies and administrations of governments–even in the U. S.

Welcome to the shiny worldwide 7-Eleven of the New World Order of processed minds and woe to all reluctant consumers.

Maria Gilardin
TUC Radio, San Francisco*


If you look closely you can see astronauts.
(Artificial Intelligence II)
(Artificial Intelligence II)
More electronic listening music from Warp
(Motion)
Video
Kenny Larkin (Azimuth)
Richard H Kirk (Virtual State)
The Artificial Intelligence series: (Artificial Intelligence I & II), AUTECHRE (Bass Cadet), AUTECHRE (Incunabula), B12 (Electro-Soma), BLACK DOG PRODUCTIONS (Bytes), FUSE (Dimension Intrusion), FUSE (Train-Tracs), POLYGON WINDOW (Surfing On Sine Waves), POLYGON WINDOW (Quoth)
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TOTAL Surveillance: Your Life on a Chip

Imagine a world in which every aspect of your life, past and present, is encrypted on a personal ID card and stored on a nationwide data base. Where virtually all communications media—soon to be 100% digital—are automatically monitored by computerized phone taps and satellites from control centers thousands of miles away. Where self-training neural net and artificial intelligence data search systems scan for undesirable lifestyles and target you *for automatic monitoring.*

Personal privacy was once considered the most sacred of our constitutional rights; agencies were severely limited by law. All that's about to change drastically thanks to a deadly combination of extremely sophisticated surveillance technology, ubiquitous digital information collection, and centralized interagency data exchange.

Until recently the "supersecret" National Reconnaissance Organization did not exist—even though it has the largest budget of any intelligence agency. They are responsible for the design, development and procurement of all US reconaissance satellites and their continued management once in orbit. Recently photos have surfaced in the press of its huge new complex being completed in Chantilly, Virginia. (Senator John Warner—Liz Taylor's ex—has described the one million square foot complex as a "Taj Mahal.") The NRO is eagerly implementing such technologies as ultra-high storage capacity holographic films (allowing huge amounts of personal information to be present on your ID card) and self-training artificial intelligence software that tracks your personal data without human intervention. A new era of ubiquitous surveillance is dawning.

A struggling military-industrial complex searching for new markets for their technologies has merged forces with a government obsessed with ever tighter control over the activities of the general public. Congresswoman Barbara Jordan has proposed a "National Employment Verification Card" that will be required for all employment in the U.S. The card will, of course, have a magnetic data strip, and altering or counterfeiting the card will be a federal felony offense.

There is a dedicated and aggressive effort underway to chart various genetic features as part of one's personal information set. The fed's goal is to have the ability to screen individuals for everything from behavioral characteristics to sexual orientation, based on genetic information embedded in your personal (and required) national ID card.

Biometric signature technologies have been developing apace. There is even a technique available to translate human DNA into bar codes for efficient digital transmission between agencies.

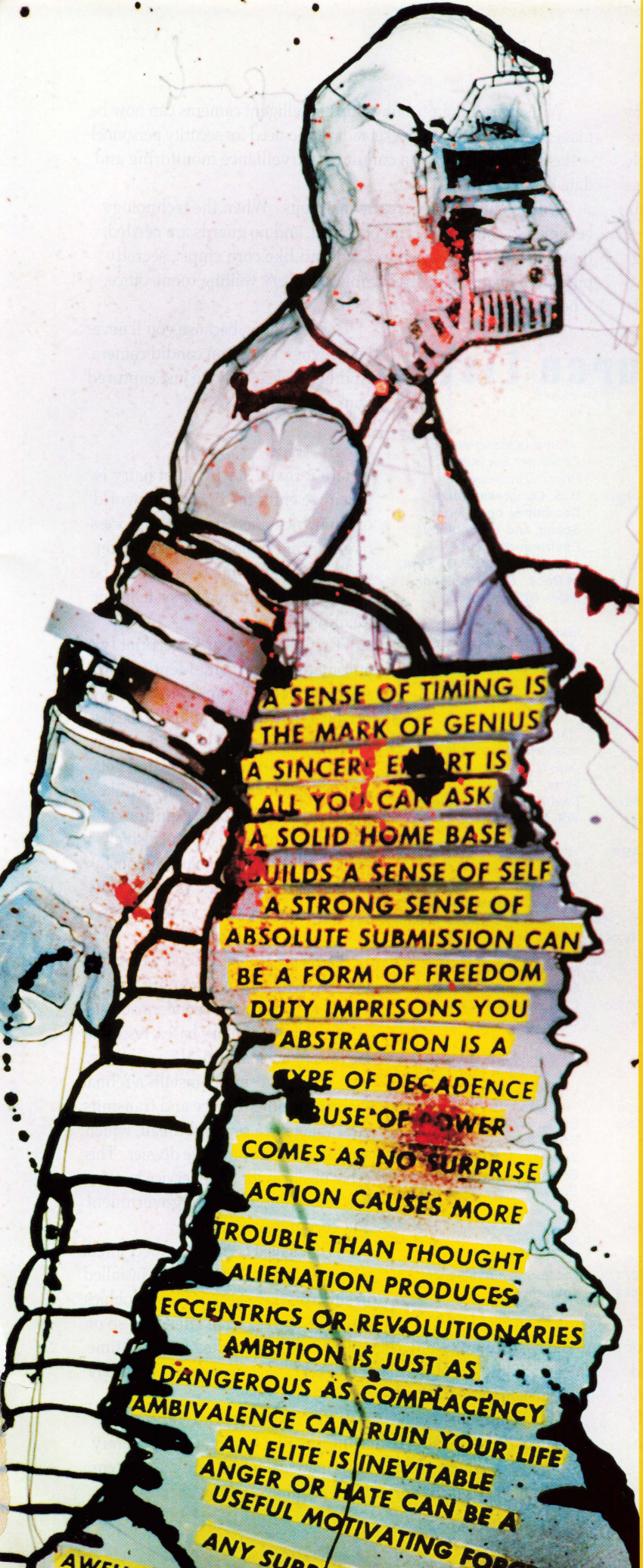
Are these science fiction story lines or the ravings of a paranoid lunatic? I wish they were. As a former research engineer at Lawrence Livermore Labs and other government labs, I watched some of these mad schemes being hatched. This technology is on the street today or about to leave the labs and believe me, it goes way beyond Orwell's worst nightmares. Listen up and hunker down.

A fundamental shift in the legal definition of personal privacy is occurring right now. A court-issued warrant used to be a universal requirement for personal surveillance, such as phone tapping, observing physical papers, and probing financial or medical records. Now, in this new age of AI-driven monitoring and data tracking systems, there are no pesky people in the loop.

A computer doesn't need to seek a court warrant to monitor every aspect of your private life. A self-training automated surveillance system doesn't need permission to observe your movements or communications.

Total data tracking is already commonplace for financial institutions and private security operations. Tomorrow, it will be commonplace for all of us. The technical elements of a massive surveillance engine are in place. It's just a matter of turning the key to fire it up. Let's examine these elements and why you should be concerned.

BY CHARLES OSTMAN



Universal Encryption Chip

It sounds logical. The feds want to preserve privacy, so their story goes, so they've announced that an encryption chip will go into all phones and computers that they buy. But what do they *really* want in the long run?

How about a government-issue encryption chip in all personal computers and communication devices? That way, the feds can deal with drug smugglers, terrorists, kiddie porn merchants, and other miscreants who use encoded messages.

Of course, they'd have to prevent tampering with the chip. In fact, the technology to do just that has already been developed at Sandia National Laboratory. Scientists there have developed an optical sensor that uses a powdered silicon optical absorption layer in an optical waveguide embedded in a chip. A micro photodetector detects even the slightest intrusion into the chip package by measuring a slight change in the photonic conduction through the waveguide. It can then send an alert via modem to a central monitoring system to notify an interested party that the device has been tampered with. Sandia is also developing a microchemical intrusion detector that would be sensitive to the chemical signature of human fingertips.

Is this all part of some master plan, or what?

In fact, in the near future, all encryption hardware and software will be subject to federal registration/authorization. Possession of unauthorized encryption/decryption capability will be punishable as a federal felony. In other words, if it doesn't have a handy back door for NSA snoops, it ain't legal.

We can further speculate that the feds will embed chips in all equipment sold for use in data transmission, digital phone calls and all other frequencies. Note: all new phone systems wired and wireless will be digital in the next three years.

Intelligent Video

Nor would you know *what's* watching you. Security cameras are becoming standard in corporate and government facilities. They may soon even be required. Why? Ostensibly because they want to recover loses in cases of theft, keep insurance premiums down, monitor peculant employees and keep intruders out.

But the new genre of video cameras now coming out of the labs do a lot more than that. They're intelligent. They can recognize faces, motion, and other interesting characteristics. In fact, they behave a lot like a human eye, with intelligent preprocessor abilities.

Intelligent cameras are needed because a security guard or cop can't monitor the dozens or hundreds of video cameras in a large facility (or dozens of satellite video surveillance channels). Intelligent cameras use artificial intelligence-based object and motion recognition. They scan for what a trained security guard looks for: certain motions, clothing, faces; the presence of people in off-limits places. Instead of watching 100 cameras, only a few at any time send pictures. A single guard or a computer can deal with that.

In fact, a steady data stream from multiple intelligent cameras can be uploaded to computerized monitoring facilities anywhere, coupled with other automated observation systems.

The next big thing in intelligent cameras will be "content-addressable" imagery. That means they'll automatically detect

ILLUSTRATION BY WENDY BRIERLEY

the content of sophisticated patterns, like a specific person's face, by matching it against a digital "wanted" poster, say. New software that can even run on cheap personal computers makes that possible. MatchMaker from Iterated Systems (Norcross, GA), for example, uses a fractal algorithm that converts image data into mathematical form, automatically recognizing and categorizing realtime "targets"—untouched by human hands and tied into a centralized monitoring facility!

A related technology called focal plane array sensors (FPA) discriminates objects at just about any distance. FPA makes it possible to use neuromorphic sensors, modeled biologically on the human eye, which are built into a camera to recognize a person or object by "associative cognition."

Carver Mead at Cal Tech has designed a broad-spectrum "human-eye" sensor using FPAs and 3D artificial neural network processors. To prove the viability of such concepts, Raytheon, under contract with the Guided Interceptor Branch of the Air Force at Elgin AFB, has developed "smart eyes" using FPAs for recognizing objects in flight, thus relieving the pilot of visual target recognition tasks while in a high-pressure combat situation.

This technology is inexpensive, easily reproducible, and will be part of standard equipment for fully automated, on-site visual and infrared surveillance in the near future.

Langley Research Center (Hampton, VA) in conjunction with Telerobotics International (Knoxville, TN) is taking a step further. They're developing an advanced surveillance camera system that's even more intelligent: it uses self-aiming and analyzes motion or other parameters. A fisheye spherical lens views a very wide field of vision while a self-contained image processing subsystem tracks several moving targets at once in real time. Video for suspect targets can be transmitted in real time to a security center.

These smart cameras are also getting incredibly tiny and low cost. The Imputer from VLSI Vision Ltd. (Edinburgh, Scotland) is a credit card-sized device that fits in the palm of your hand. It consists of a complete CCD video camera mounted on a circuit board plus an on-board DSP (digital signal processing) coprocessor for realtime image enhancement, feature detection, correlation and convolution (for fast analysis on the fly), and even an optional library of pre-stored feature data so that the camera can independently recognize a specific face or other security-oriented data. It can also download its captured visual data via telephone line to a data collection and processing facility.

With everything on a few chips, intelligent cameras can now be mass-manufactured like pocket radios. No need for security personnel—they can be linked to a computer surveillance monitoring and data base system.

This is where it gets really insidious. When the technology becomes so cheap, tiny, and powerful, and no guards are needed, they can sprinkle these things around like corn chips...secretly putting them on every street corner, in every waiting room, office, wherever.

Keep smiling, because you'll never know when you're on candid camera. And hey, relax, they've just captured your surfaces.

Biometrics

Where it really starts to get hairy is when we enter the brave new world of Biometrics. Biometrics is the process of gathering biological information and converting it into data that can be uploaded into automated systems for identifying you.

They can use your fingerprint (via automated fingerprint identification systems), retinal scan, voice or other personal signatures. Miros of Wellesley, MA has recently introduced a system called Face-to-Face, using neural nets, that is particularly insidious. Unlike fingerprint or palm recognition, it identifies your face "non-intrusively" (that's technospeak for surreptitiously) with 99% recognition. It can even identify your face when you add glasses or a change your hairstyle.

There are biometric service bureaus like TRW that provide immediate access to personal dossier information to prisons, banks, military bases, research facilities, pharmaceutical companies, etc. The client simply installs a retinal scanner or other device and transmits your image to a service bureau, which sends back your complete dossier. This is big business for these service bureaus. We're talking *billions* in government and corporate contracts.

What's next? We can expect intelligent scanning systems will be installed in supermarket checkout lines, lobbies, airports, stores, ATM sites, and so on in the near future. Known shoplifters will be tracked from the time they walk into the store. There'll be a *cordon sanitaire* around playgrounds and day care centers.

What happens when the FBI ties its fingerprint verification system at its National Criminal Information Center, with its library of over 250,000 fingerprints, into the national health care card system, employment ID card, IRS, and just about everything else?

Resource List

Compiled by Sylvia Tan

Who Owns Information? From Privacy to Public Access, Anne Wells Branscomb, Basic Books, 1994.

Deep Black: Space Espionage and National Security, William E. Burrows, Random House, New York, 1986.

The Electronic Eye—The Rise of Surveillance Society, David Lyon, University of Minnesota Press, 1994.

Tuning In to Scanning—From Police to Satellite Bands, Bob Kay, TAB Books, 1994. How to listen in on cordless telephones, military, FBI, Secret Service, and NASA communications.

Undercover: Police Surveillance in America, Gary T. Marx, University of California Press, 1988.

Privacy for Sale: How Computerization Has Made Everyone's Private Life an Open Secret, Jeffrey Rothfeder, Simon and Schuster, 1992.

America's Secret Eyes in Space: The U.S. Keyhole Spy Satellite Program, Jeffrey T. Richelson, Harper & Row, 1990.

Hobbyist's Guide to COMINT Collection and Analysis, Tom Roach, 1330 Copper Peak Lane, San Jose, CA 95120-4271. DIY dirty NSA-style tricks.

"Communications and Computer Surveillance, Privacy, and Security," U. S. Congress House Committee on Science, Space, and Technology, Environment, and Aviation, U.S. G.P.O., Supt. of Docs., Congressional Sales Office, 1994.

Electronic Surveillance Manual, U.S. Dept. of Justice, Criminal Division, Office of Enforcement Operations, 1991.

"Improved surveillance is possible by combining data from different systems," David Diez, *ICAO Journal* Vol. 48, no. 2, Mar. 1993.

"Strategic Satellite Systems in a Post-Cold War Environment," United States Congress House Committee on Government Operations Legislation and National Security Subcommittee, U.S. G.P.O., Supt. of Docs., Congressional Sales Office, 1994.

"Surveillance Technologies and Imaging Components: 13-14 April 1993, Orlando, Florida," Sankaran Gowrinathan, C. Bruce Johnson, James F. Shanley, *The International Society for Optical Engineering—SPIE*, 1993.

Intelligence Inc. San Mateo, CA (415) 513-5549. Catalog of surveillance equipment.

If the FBI has *you* listed as a radical or some other species of undesirable, will they be automatically notified whenever you appear at a doctor's office? Every time you use an ATM? What about when you buy a naughty magazine or subscribe to a "politically incorrect" publication? Where does this stuff stop?

Satellite Surveillance

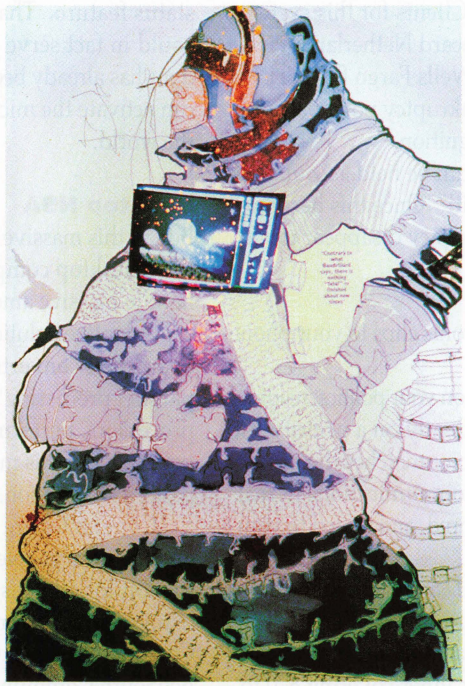
It doesn't. Your image may be up for sale right now. Ten-meter-resolution satellite images of those strange weeds in your back yard are available to any buyer from the French company SPOT Image of Reston, Virginia.

Even sharper images are available. Spy satellite images at two meters resolution are now available from World Map. About 30 other countries—particularly Germany, Israel, and China—are planning to launch satellite surveillance systems.

Producers of satellite and surveillance equipment and large database processing services like TRW have huge financial stakes in this $8 billion market. They've put massive pressure on the CIA and DoD to loosen up control of satellite surveillance technology. Three of them—Lockheed, Orbital Sciences (which is launching Eyeglass), and World View—are launching satellites with resolutions from one to three meters by 1997.

Another recently-formed U.S. company, Teledesic, is planning a vast $9 billion global communication system using 840 geosynchronous orbit satellites, scheduled for 2001. There would be no single area on the planet that could not be "seen" on demand, and more importantly, virtually all digital communications could be linked through this universal transponder system.

Suddenly we're just one step from a universal monitoring system. The satellites could conceivably serve as platforms for multi-spectral, on-demand, visual and IR surveillance of any coördinate on the planetary surface. Note: both founders of Teledesic, Bill Gates and Craig McCaw, declined to be interviewed by MONDO on this topic.



Robot Spies

Unmanned robotic devices (airborne and land-based) are now here that can observe an individual or dwelling day or night from a distance. They can also monitor communications (using RF signatures) over a broad spectrum of frequencies. They can be activated from a distant control center thousands of miles away from the target; and surveillance data can be collected and examined in real time via satellite link.

For example, there's the SR2 Security Robot System from Cybermotion Inc. of Roanoke, Virginia. Designed to "replace human security personnel," the SR2 patrols a region of up to 15 square miles for 12 hour shifts (between charges), using ultrasonic, optical, and infrared sensors plus onboard "fuzzy logic" to navigate around complex obstacles and interpret data. An operator at a remote site controls and interacts with a group of these robots via bidirectional RF data link.

There's also NASA's High Altitude Long Endurance (HALE) unmanned aircraft. HALE can stay airborne for days at a time, carrying CCD optical and infrared camera systems. These lightweight stealth aircraft are flown by remote control, using a satellite data link to an operational command center that can be thousands of miles away. Perfect for kamikaze-style strikes.

And the U.S. Navy is soliciting proposals to develop a robotic, flyable platform for optical and infrared surveillance, designed for "riot control, border surveillance, and personnel detection."

A fuzzy logic based RF communications signal/signature analysis system has been solicited by the U.S. Navy. It will be able to recognize the content of any transmitted signal from anywhere, regardless of spread spectrum, encryption, or other electronic signal countermeasures. Commercial applications cited in the solicitation are "law enforcement, surveillance, drug interdiction, illegal immigrant control, etc."

Real time monitoring by these robotic devices can be remotely activated from anywhere. No search warrants, no court authorizations.

Massively Parallel Computers and Optical Storage

All these surveillance systems generate *massive* amounts of information. Until recently this would have been impractical for millions of people.

Currently, massive optical data storage technologies coupled with extremely powerful, massively parallel processing computers are capable of very high-volume data storage and very high-speed data analysis.

The Department of Commerce is financing a joint project with Tamarack Storage Devices to develop a photo-refractive holographic data storage system capable of handling hundreds of terabytes (that's 10^{-12} bytes) of data for extremely large database processing operations. This is *exactly* the type of information storage/processing capability required for a nationwide population monitoring system.

Thinking Machines Inc., of Cambridge, MA has recently announced a massively parallel processing supercomputer, the CM-5, specifically designed for extremely huge data base processing applications. It can access an astonishing 3.2 terabytes of data with a bandwidth of up to 4.2 gigabytes per second, distributed over a network of 16,000 processing nodes that can be located anywhere.

A handful of these systems can maintain an up-to-date population monitoring/data processing system for the entire country.

What do you think is going to be in that secret $350 million National Reconnaissance Organization (NRO) building in Chantilly, VA? Hint: they're not watching Russia any more.

Neural Nets and AI

Of course, all these operations normally require huge staffs of trained experts. That's where neural nets and artificial intelligence come in.

Neural net processing systems can search for "behavioral tendencies" within a data base and automatically flag certain individuals

for surveillance and "attention" from interested enforcement agencies, employers, political researchers, etc. This is a rung up from knowbots and gobots.

A good example is the ominous Origin system (the U.S. base is Tampa, FL), a worldwide realtime, intelligent vision processing and networking database system designed for "intelligent security data base monitoring and observation" for law enforcement and government agencies. It uses Iterated Systems' Matchmaker software running on a global computer network. A surveillance camera or biometric sensor anywhere can feed signals into the network and get back a name of the person in seconds.

HNC's (San Diego, CA) DataBase Mining Workstation is a dedicated neural network processing engine designed to look for "interesting" data sets on its own. The user "trains" the system for topics or features of interest. Once effectively trained, the system automatically tracks anything (or anyone) that gets its attention and draws its own conclusions.

HNC also sells the Falcon neural net credit card "fraud and abuse" detection system. It automatically "learns" about unusual spending habits and related behavioral feature sets. Clients for this system include AT&T, Colonial National Bank, Eurocard Netherland, First USA Bank, Household Credit Services, and Wells Fargo Bank. HNC is also working on credit risk evaluation, bankruptcy potential, and other forms of financial activity pattern recognition.

Again, no need for pesky humans who can be held accountable for violation of privacy. "The machine did it!" Once this becomes routine, current legally-defined barriers to privacy disappear totally.

Automated Voice Recognition

In the good old days, they had to attach electronic clips to your phone and get court authorization. Not so today.

Let's say you're on a list somewhere based on your politics, reading, or drug, or sexual habits. Zap: you're suddenly on a priority list for surveillance. You make a call and your voice matches the profile. The system starts to listen in to your vocal communications in real time. The voice data can then be digitized, stored, and added to your surveillance dossier by the computer.

If you've seen the movie *Clear and Present Danger*, you know how easily intelligence agencies monitor cellular phone calls, satellite phone calls, and anything else that's broadcast. (It's actually easy for anyone to monitor cellular calls with a scanner covering 870 to 896 MHz or a UHF TV receiver tuned to channels 80 to 83 and a good UHF antenna.) Then they digitize speech signals and convert them into text data, which can then be processed to search for specific words or phrases.

All this will be a lot easier when the telephone companies introduce Asynchronous Transfer Mode (ATM) communications in a few years. Virtually all communications, including data transmission and business and personal phone calls will be routed through the same universal communication channel, making the job of listening in much easier.

Dialogic Corp. (Parsippany, NJ) is developing "second generation" modular telephone call-processing and automated speech recognition system hardware and software. Uses include online automatic keyword and phrase recognition. That is, any word or word combination that may be "interesting" to an automated listening system can cue automated storage of an entire conversation for further analysis.

The Sprint voice-activated phone card is already in use. But several corporations including TRW have already taken it a step further. They can analyze and store voice signatures for every telephone caller in the country for a much larger market: voice recognition for phone credit card verification and voice-triggered ID security systems. Essentially, you'll be forced to use voice ID or no credit or access. It's a simple matter to adapt this kind of technology for a national tracking system.

The U.S. Navy wants to take it a step further. As evidenced by its recent FY 94 "Global Surveillance and Communications" technology solicitations (as per the SBIR development funding program), they are developing a "robust signal processing of speech" capability with "voice communications countermeasures and counter-counter measures" as part of a comprehensive, speech recognition and processing system.

Sun Microsystems workstations include a microphone and speech recognition chip. A recent security alert from the Computer Emergency Response Team at Carnegie Mellon University disclosed that the workstations had been pre-programmed with a "world readable" status feature. That means any of these networked workstations could in fact serve as a remotely-monitored microphone. A back door has already been built into this workstation. That means anyone can activate the microphone to listen in remotely from anywhere in the world.

Desktop NSA

But all this massive power is not limited to giant computer centers. Even desktop computers are now becoming powerful enough to handle massive amounts of intelligence information.

Adaptive Solutions Inc. (Beaverton, OR) sells a $7000 CNAPS/PC board that converts a 486 or Pentium computer into a massively parallel processing engine. The boards, each of which contains 128 processors, perform 2.56 billion multiply/accumulate operations per second. This means a 1000 times performance improvement in pattern recognition.

Companies are turning these powerful new surveillance tools on their own people too. For example, Microsoft has a secret project to monitor all keystrokes of its personnel to "improve efficiency" using neural net and artificial intelligence software. And Edify Corp. (Santa Clara, CA) is supplying "intelligent agent" software to BellSouth Communications Systems (Roanoke, VA). It will be built into BellSouth's Electronic Workforce software. Its customers will use it for interactive voice response and recognition, personnel and client workforce screening, efficiency monitoring, and workflow automation.

Probation Nation

This is *not* another paranoid "1984" scenario based on some futuristic fantasy. For the first time in history, the technology is available to design and implement such a ubiquitous surveillance/monitoring system. The crisis climate created by the media—particularly television "news magazines"—is being used to *mandate* this horror.

The political will to do this is here and it is being touted as an acceptable solution to such problems as crime and illegal immigrants. The general public is not even remotely familiar with the technical details of how such a repressive system could be implemented and won't wake up until they're virtual prisoners in a totally automated Surveillance Society. M+2

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SNITCH CHIPS, SLAVE BRACELETS AND YOU

OR LEMME OFF THIS BOARDGAME

Almost from the day President Clinton assumed office, it became obvious. The secret guardians of national security and public order were fully prepared to pervert the new generation of information technologies into a monstrously sophisticated digitotalitarian police state.

The Total Surveillance State taking shape under his leadership appears to have three broad components:

- *Automatic spying on all public and private communications networks.*
- *Automatic "profiling" of all citizens by computer: gathering all available details—health, consumer habits, political activities, etc.*
- *Digital identity and social control mechanisms, in particular, Smart Cards featuring ultra-dense integrated circuitry and trackable Clipper-chip encryption.*

A Smart Card is literally a computer on a credit card, complete with large amounts of digital storage, and even potential wireless communications capabilities. Once Smart Cards and digital cash come into wide use, there is no doubt that this system can be designed to function with ruthless effectiveness.

The information sciences—and the touted "Information Superhighway"—are being perverted into a Total Surveillance State. This year, for example, numerous federal agencies suddenly announced virtually complete plans to restrict access to their services to Smart Cards only.

CLIPPER: THE "SNITCH CHIP"

Everybody needs papers in a police state. Ironically, the automated Gestapo no longer needs to issue them. Instead computer-controlled cards and high-speed computers will monitor special "snitch-chips" built into household appliances like telephones and cable boxes. *Ja wohl!* The Automatic Gestapo.

Recently some press reports contended that the Clipper chip is "dead." I'll let Janet Reno answer that one (7/22/94): "We are working with industry to develop the same capability [Clipper-style surveillance] for data networks that Clipper provides for voice networks. *I would hardly call that backing away."*

Clipper chips and Clipper-like software snooping schemes are definitely not dead. On the contrary, they are the very lynchpin of the automated Gestapo—for both surveillance and personal identification.

President Clinton carefully avoided mentioning Clipper's planned identification capabilities when he personally announced the chip at a splashy Rose Garden press conference within weeks of assuming office. He claimed that the chip was created by "government scientists" to "ensure personal privacy" for telephone conversations.

Beyond the smarmy assurances, there was another tipoff that something was peculiar with Clipper: the chip processes information with *blazing speed.* It has a bandwidth of 12 Megabits per second. That's fast enough to encrypt a *video signal* from a small slow-scan camera—perhaps in a videophone, or perhaps in other household appliances with high-speed communications links. Your cable box, for instance.

Ever since he announced it, Clinton has deftly moved the Clipper project around, from the NSA to the Justice Department, to the National Institute of Science and Technology (NIST) and the Treasury Department. He is dodging the serious questions—and growing outrage—over the suspicious secret chip. So what did you expect of someone who didn't inhale?

PROJECT TESSEREA: CLIPPER SLAVE BRACELETS

Tesserea, classics fans, means "a piece of a mosaic." In ancient Rome, *tessereae* were also identity tags, which were given to soldiers and slaves. Slaves caught without them usually came to grief.

Today, *tesserea* still means the same thing at the NSA and the out-of-the-limelight Defense Messaging Agency (DMA). For the past few years, these two secret-government bastions have collaborated to create *Tesserea* devices. These are computerized Smart Cards with large amounts of flash memory capacity, sometimes prototype wireless communications devices—and an on-board "Capstone" chip.

BY CLARK MATTHEWS **ILLUSTRATION BY TIM BROCK**

Capstone is Clipper's smarter brother, sometimes called "Clipper 2." It's is the brains of Smart Cards. Each Capstone chip has a unique "digital signature" that identifies it (and its owner) to the scanning computers of the automatic Gestapo on the communications networks. In other words, whether you use your *Tesserea* card to claim disability benefits or buy golf balls, every transaction will be duly recorded.

There are some interesting angles to these latter-day slave bracelets. First of all, *Tesserea* cards were being tested at the DMA years ago—long before president Clinton's Clipper announcement. Another interesting fact is the overall code name of the *Tesserea* project. The project is called "Mosaic."

Someone has a classical education, it seems.

Capstone *Tesserea* cards are being pushed hard by practically every agency and department of Clinton's government. The pretexts seem almost endless. They range from tracking "childhood immunizations" by Donna Shalala's Department of Health, Education and Welfare (HEW) to recommended "work permits" and a "digital passport" created at the Immigration & Naturalization Service (INS).

Other pretexts include "federal benefits delivery systems" proposed for the Social Security Administration and Veterans Administration, as well as planned nationwide authorities for distributing military pensions, food stamps, and other forms of public assistance. Then there's the infamous "Health Security Card" touted as part of the biggest cat's paw of all—"Health Care Reform."

And lastly there's the Postal Service's "U.S. Card," proposed as a no-bones-about-it universal identity card. A postal spokesman actually hyped the U.S. Card as a device to replace the "twenty million 'Little Brothers'" waiting in the wings, from every federal agency under Clinton's control.

Each of these initiatives comes complete with an oh-so-vaguely described national distributed database. The sole exception is the U.S. Card, which will serve as a universal identifier required for *all integrated government databases.*

Trouble on the Line: The Digital Telephony Act

Want to start a police state? Control the telephone network. Build telephone bugs into all new buildings. Design it so you can turn them on whenever you like.

"Every carrier must ensure that its equipment allows for interception of a communication concurrent with the transmission and provide call identifying information to a remote government facility. Manufacturers and support service providers must also assist by developing equipment and software with these capabilities. Providers have four years... to comply." *—from the FBI's proposed "Digital Telephony and Privacy Improvement Act of 1994."*

Read it and weep.

In the tradition of Hoover, the FBI has been flacking in Congress for approval of its "Digital Telephony and Privacy Improvement Act" of 1994. This proposed law would legalize a computerized universal surveillance system on the digital telephone network. That's right: The automatic Gestapo.

From the rarified heights of the Jane Edgar Hoover Headquarters Building, FBI Director Freeh and Janet Reno are even offering to sweeten the deal. They'll pay telephone companies $500 Million (in taxpayer dollars) to build the automatic Gestapo into their equipment. As if they had a choice.

Then telephone subscribers will get stuck with the monthly bill for maintaining and expanding the system. And what a system!

The FBI's prototype systems—"Smart Boxes" developed by Bell South—are secret, unaccountable and virtually undetectable. They work by remote control and can automatically bug your house through the microphones in your telephones.

According to the specifications for Bell South's Smart Boxes, just *one* of these wonderful gadgets can snoop on an entire residential neighborhood. The box offers America's secret police several different levels of surveillance, depending on the amount of interest in the subject.

At the basic level the device is programmed to record all the phone numbers the victim calls, and the phone numbers of everyone who calls the victim. 64 kilobytes of storage is provided to store the compressed telephone data. Every day, the box automatically sends this compressed log of phone numbers to its master computer for storage and profiling.

For industrial-strength surveillance, Smart Boxes can be programmed to record everything that passes over the digital phone line. Conversations, faxes, data calls and video. The box has its own high-speed line for sending these interceptions to its master computer—possibly thousands of miles away.

Another program option lets the automatic Gestapo give especially interesting victims the full Congressional treatment: continuous, 24-hour monitoring of every room with a telephone.

With Enough Shoeboxes...

The technical lynchpin of this leviathan is the new generation of blindingly powerful computers. These feature parallel-processor architectures and utilize self-teaching AI software. They're already being deployed on the nation's business and financial networks. These systems can automatically snoop on financial transactions, create "profiles" of the people who make the transactions, and store the information for later analysis.

In particular, the Financial Crimes Enforcement Network (FinCEN), part of the Treasury Department headquartered in Richmond, Virginia, has created a system with enough computing power to scan all of the nation's interbank networks and profile money movements, cash transactions, and credit card purchases.

FinCEN's scanning and profiling operation uses high-powered mainframe-type computers and works in near-real-time. It is also reported to rely on pattern-matching AI software to identify neighborhoods—or people—with large amounts of cash or other tangible assets. Pretty impressive.

Not long after Hitler gained power in Germany, his government started gathering information on "undesirables." The Nazis were so bent on finding undesirables that they didn't stop at their own borders. They recruited collaborators in other countries who contributed *their* undesirables to the cause.

Within 10 years, these undesirables were being rounded up throughout Europe. In France, Holland, Poland, Hungary, Austria —wherever the Nazis went, they were prepared with the names of their soon-to-be-victims.

They arrested at least 15 million people. And they did it all with shoeboxes full of notecards.

CYBER MIND

virtual reality centers

Reality

Virtual Reality

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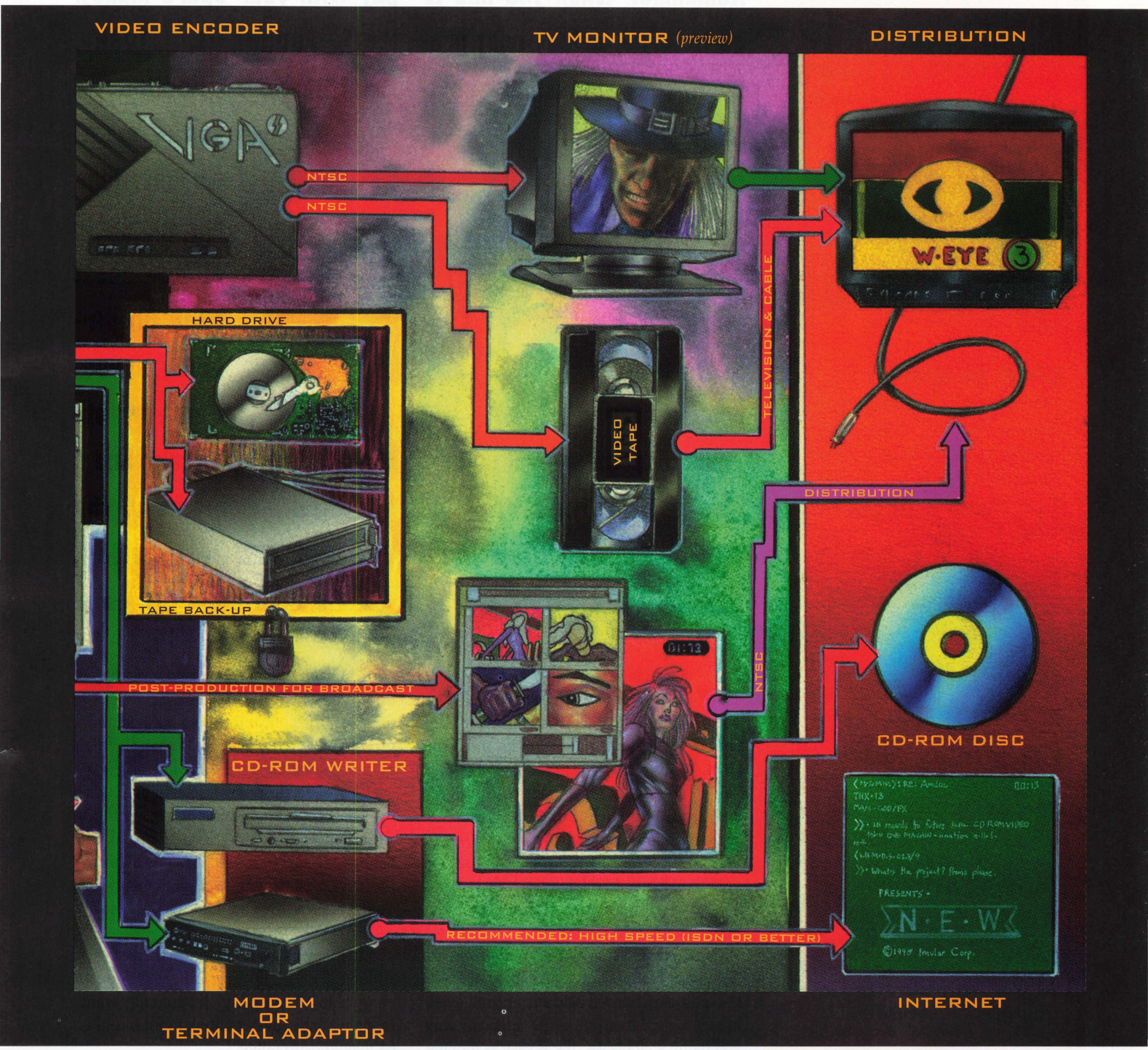
We're talking metastasized Metaverses. Many-to-many replaces one-to-many. Circle replaces pyramid, with center everywhere. You as a star *all* the time, not just 15 minutes. Individualized soaps, *www.whitehouse.gov* politics. *Fahrenheit 451*: are we there yet?

OK, let's look at these new tools: Desktop video, Mosaic clones, CU-SeeMe, VRML, virtual 3D Web worlds, VTV surround video. These are your new cyberprostheses. Use 'em or lose 'em.

Flowchart Hand-Rendered by Shea Pensa



DESKTOP VIDEO: THE BIG PICTURE

All the DTV tools you need are here now. DIY video production is easy and relatively cheap—compared to traditional editing studios. First, grab some video and audio and digitize it in a plug-in board in your beefed-up PC or Mac. Now it's pure pixels, so you can edit anything on any frame and move it around in any sequence you like. Go wild: add SFX, morphing, still images, titling, whatever you damn well please.

What, you've created *the* killer new TV show? Great: output it to video tape, get it on cable, write it to CD-ROM. Or package up a QuickTime clip and blast it out on the Web.

Go ahead, take over the media! M2

by Wes Thomas

analog linear video

The past. Based on tape formats, in a straight-line, linear format, using an analog recording medium such as VHS, U-matic, or even Betacam SP.

AVI

(*Audio Video Interleave*)
Microsoft's video standard. Offers only two channels of audio, one of video.

blue screen

Used to composite people into a scene in a movie or video. You shoot the person in front of a blue background. A program then places the person into the original scene.

compression

Squeezing massive amounts of video and image data down to manageable sizes and data rates without reducing the image quality to mush.

CD-quality audio board

Digitizes the audio at the same quality as a regular music CD.

compositing

Combining images, graphics, computer-generated backgrounds, and video into a final scene. Example: the animation in *The Mask* was composited by ILM into the film.

disk array

A group of hard drives that acts like one. Files can be transferred at very rapid rates. Ideal for video.

desktop digital video

Editing video in a computer.

Remember when you had to pay with your spare kidney. Well, Forget it. Today, non-linear digital video recorders and small workstations are available at low cost. They do virtually everything the old analog linear systems did, and a lot more. Welcome to the desktop digital video revolution.

DIY DTV

By Hank Duderstadt

Now you can take those **field tapes** you shot with your own camcorder and feed them into a computer that converts the analog (video and audio) signals into digital form. Once in this magic all-digital world of ones and zeros, the sky's the limit. With a little additional equipment, your system can become a video Veg-o-matic.

Produce your own *Jurassic Park* set in your backyard. Add James Cagney to your Christmas dinner video. Create complex music videos that would put Peter Gabriel to shame. Bend, warp, twist, colorize, solarize, dissolve, pixellate, fractalize video in ways the most experienced acid surfer can't even imagine. And re-arrange this video any way you damn well please. It's as easy as moving the clips around with a mouse.

So are you ready to dash out and turn your computer into a digital non-linear video workstation? Well, hold on—it's not as easy as running a 3D app and suddenly being able to do really cool animation. It's more like prepping for a moon launch. No other medium can bring even the world's fastest computers to their knees like digital video.

But if you have a little extra cash, a fair amount of computer savvy, and gargantuan drive, you can deal with it.

First, the computer. I've pushed and prodded my lowly **Mac IIci** to handle full motion digital video. A little like taking a '65 VW beetle, dropping a 16 cylinder, twin turbocharger Ferrari motor into it, adding slicks to race in the Indy 500—it runs like a bat out of hell, but it's still a beetle at heart. My advice: start with enough horsepower. That means at least a **Quadra** level Mac or a 486/66 PC.

Then comes the RAM...the more the better. At least 20 megs. DV applications eat up lots of space to run properly. If you really want to have a killer system, look more into the 64 meg-and-up range.

What about getting the video into your computer and onto the hard drives? For that you need a **video digitizer** board. These boards come in various flavors and combinations. The most basic will bring in straight digital video, even audio, though not at CD quality. Boards like this include the Sigma **Movie**, **Movie** board for the Macintosh or the Creative Labs **Video Blaster** for PCs. The **Video Spigot** (sold by SuperMac and

HOW TO CREATE FAKE VIDEOS

Reality is a crutch for people who can't handle digital video. Right now, the hottest movie effects are those scenes in *Forrest Gump* where Tom Hanks appears to be shaking hands with people like JFK. Any kind of warped combination is possible. Create footage of that meeting between Ross Perot and the alien. Prove that Bill and Paula spent a weekend together at Club Med. Make yourself into a superhero. Whatever.

Industrial Light & Magic used an SGI computer to create Forrest Gump's adventures. You can do with it your own PC or Mac. Here's how:

1. Use Neil Media's Video Graffiti to **Rotoscope** out the veteran shaking JFK's hand in the original shot.

2. Shoot your weird friend Jules in the same position in front of a Chromakey **blue screen**, shaking JFK's invisible hand.

3. Use Premiere to **composite** Jules' blue screen shot with Kennedy's using the transparency feature. Use Premiere's filters to take the color out of the blue screen shot, add noise, and blend the two shots together as a believable black & white movie.

4. Use Graffiti again to clean up any rough spots in the shot and voilà! You've got something that you might be able to sell to a tabloid TV show for big bucks... or at least amaze and astound Jules.

Creative Labs) is available for both types of computer.

These are fine for those really cool **QuickTime** or **AVI** movies that you can send out over the net. But if your goal is to produce the fabled **full screen/full motion** masterpieces that MTV would air, you'd better up your credit limits and start looking at something like the **RasterOps Edit Suite Pro** or **Radius VideoVision Studio** systems on the Mac or the **Targa 2000**, **Truvision Bravado 24**, or **Intel Smart Video** on the IBM. These boards use **compression** chips to speed up getting the video onto and off of the hard drive. They come with a price tag of over $3k per board. Add to that another grand for a **CD quality audio board**—that's *before* you start looking at storage space—and you can begin to see this ain't cheap.

The rule of thumb with storage is you can *never* have too much. Digital video, even when heavily compressed, eats up space like a bad roommate. Serious storage for this stuff starts at 1 gigabyte—that's 1000 megabytes—costing about $800. If your goal is to do documentaries, you'd best start looking at the lofty reaches of drives like Seagate's new 9 gig (about $4200). If you want full-screen/full-motion, consider going with a **disk array** They aren't cheap ($2000 on up) but they run like a banshee.

Other items to consider: a second big monitor ($1000; editing apps gobble up screen real estate faster than a greedy developer); a tape backup system like a **DAT** ($800) or **Exabyte** ($1200), which allows you to backup those massive hard drives; and if you want to go back out to video tape, an encoder ($500). Speaking of tape, you can use your camcorder or VHS machine to play the stuff into your video digitizer. But if you're really into quality, look at one of the professional Hi-8 rigs with a

editing programs

Use the video clips you have digitized into the computer and allow you to assemble them. Like a traditional editing bay, except their order can be changed easily.

encoder

Takes that beautiful RGB image you've created with your editor and transforms it into that crappy NTSC stuff that gets spewed out over America's broadcast and cable television systems.

field tape

What you record onto in the camcorder or field deck. Becomes digitized into a computer or used in an on-line edit.

full-screen/ full-motion video

The holy grail of computer based video. Images on your computer look as good as those on TV. For a price.

JPEG/MPEG compression

Two very popular ways to compress video. JEPG is designed for still images, MPEG for moving video. Both require special hardware compression boards for full frame/full motion.

non-linear digital video

The future. Built around video that has been converted into digital information and stored on computer hard drives, so it can be played back in any sequence you desire.

NTSC

The standard for television signals used by the United States, Japan, and several other countries.

off-line/on-line editing

Off-line edit: using the field tapes, you edit together a rough cut of the program. Your goal: to end up with a list of shots and how they fit together—an Edit Decision List (EDL), which is used to assemble the final program in an on-line edit.

On-line edit: you take the original field tapes, the EDL, any graphics and audio tapes, and go to a big, expensive post-production facility where you hand everything over to a group of "seasoned professionals" who use them to create your vision. If you really want to act like a client, sit in the back of the edit suite munching on free snacks, talking on the phone with your agent or broker, and generally ignoring the process. Then, near the end, leap up in horror and proclaim that something is terribly wrong with the first five edits of the show and the whole thing will have to be redone...at the facility's expense, of course.

filters

Adobe Photoshop and Premiere support small extension files called plug-ins. They can do anything from transform a still photograph into a watercolor painting to moving video in what appears to be an animated stained glass window.

post-production

What happens after the field tapes are edited: logging the footage, scoring and composition of music, sound effects, design and execution of graphics and special effects, and the Off-line and On-line edits.

QuickTime

Apple's standard for computer based video. Unlike traditional

time base corrector ($4000). Or if your uncle owns Cincinnati, pop for a UVW **Betacam SP** machine ($5000).

In the software arena, the best bet is to use what comes bundled with your video board—in all probability **Adobe Premiere**, which on the IBM side is very powerful and on the Mac side is fantastic. This **editing program** is the heart of your digital video work, so really play with the program and work to get the feel of it. **DVision** is another wonderful editing package for the IBM. The list goes on and on. Try them out on a friend's machine first.

Then start looking at **special effects apps** like **CoSA After F/X**—an absolutely killer program that has been used regularly in Hollywood for **compositing** movies (it's two grand but there's a version called **Image F/X** for under $500). **Video Graffiti** is a really cool app that allows you to paint on individual frames using a process called **rotoscoping**. Despite how much you can do to warp, twist, spindle, and basically thrash video, you're going to reach a point where the only answer is animation. *The* application that comes to mind first is **Macromedia Director** (Mac and the PC), which can do everything from basic cell animation to moving things around the screen. And you create an animation on a blue background you can later blend it into a video clip, as in *Roger Rabbit*.

Of course, if character animation is your goal, look into the 3D animation world. A program I love is **Playmation** by Will Vinton (the creator of Claymation). Imagine being able to do everything Will does with clay...on a computer.

If you really want to surf the frothy edge of the new media wave, you'll need to look at interactive videos. On the Mac, **HyperCard** lets you add interactivity to a QuickTime movie by turning parts of the screen into buttons that allows you to jump to other parts of the clip, or to other clips. This requires a certain amount of programming. **Director** for both Windows and the Mac also allows you to add buttons to Quicktime movies, but with some code needed. Now there's another solution: **Video Navigator** from Radiant Enterprises (San Francisco) makes it easier to create buttons.

OK...now that we have the pieces, let's look at two complete systems that cover the low and high end of digital video editing.

For those on a tight budget, Apple just came out with the **Quadra 630**, a very fast machine that is designed as a cheap way into the digital video world. It starts at about $1200 list with 4 meg of RAM, a 230 meg hard drive, and built in CD quality sound. Add the a/v option ($150) and you'll have both video input and output that you can play back on a standard NTSC monitor or VCR. It comes bundled with Avid **Videoshop**, which is a substantial editing program that rivals Adobe **Premiere** in many ways. You'll also need to pump up the RAM to at least 20 meg ($600), add at least a 14" monitor ($300), a substantial external hard drive (1.2 gig—$800 from APS), plus your camcorder and TV—a very adequate system for about 3 grand.

If you've just inherited a bunch of money —or you're on somebody else's budget— you should go all out and start with a loaded **Quadra 950** with 64 Meg of RAM, an internal 1 Gig hard Drive, and a built-in CD-ROM drive. Add two of the new 9 gigabyte **Seagate** hard drives (about $4500 per from APS), a RasterOps **Editing Suite Pro** system (which comes with Premiere and other assorted software for $3500), a Digidesign **Audio-Media II** 16 bit audio board ($1200), two 17" color monitors ($1000 per), an APS **Exabyte** tape drive (about $1400), a PLI Quick **SCSI** F hard drive accelerator board ($600), throw in a Sony UVW-1400 **Betacam SP** video deck ($6000), and you'll have spent over 36 thousand dollars for the ultimate Mac system.

I was happy to see the VideoVision board come out. People didn't realize what that meant—30 frames a second, full screen, turn it into a tape, and you're done. It's broadcast quality. Before, you never could be quite there. It was close but now they did it. Radius did it. It's over, in terms of the theoretical. You can do it on your desktop now, broadcast quality.

—Randy James, WeeBeeTeeVee

If you're making MTV fare, then this grainy, crusty 15 frames a second stuff is a plus. In the music video business, there's this little $99 black-and-white camera that records onto audio tape that gives you a 90-minute cassette in ten minutes—it whips through with video on it. Those things are like gold because they give you something—a real textured, grainy, crusty, funky look—you get that for free on the VideoSpigot—or on a JPEG card with compression set too high. I have this romantic image of these generation X'ers with theirs, saying, "Yeah, that's so cool, his head's yellow," and making this stuff by the seat of their pants, doing it because it's rough and crusty and isn't polished. That's part of the charm—the guerrilla digital jockey aspect of it all. You don't want it to look too good because that would be missing the point.

—Peter Barrett, Vice President for Development Rocket Science

The Valis Group's Metaflo gives you a bizarre form of image processing that you would have to spend hours in a Harry suite to duplicate, and I'm sitting at home in a bathrobe doing it!

—John Sanborn, Director of Liquid Television's *"Human Bomb"*

Note well: Both the 630 and the 950 can run the exact same software and do all the same gee whiz effects. They differ on *how much* video they will actually work with, *how quickly* they will work with it, and *how good* the final video will look.

The low-end 630 system would be fine for up to 15 minute, quarter-screen QuickTime movies. The quality won't be the legendary full screen/full motion, take-your-breath-away, but with the newest version of QuickTime it won't be an animated postage stamp either. Leave lots of time for the machine to do its magic though. **Rendering time** can take days.

The high-end system will allow you to work with an hour-long show at S-VHS quality, and get it done in days, instead of weeks. Even then, don't expect it to be instantaneous.

Oh, and that eternal question—what about the **PowerPC**? Well, it's the future, but unfortunately not enough video boards work with it, and a real PowerPC (with optimized circuits) won't be out until early next year.

So there you are. The power is in your hands to do amazing things that would have required up to $900 an hour in a traditional editing facility only two years ago. You've got a really cool digital video editing station loaded up and ready to go, a stack of manuals that fills your bedroom, and a debt that Ross Perot would choke on.

For more on assembling video systems, check out The Digital Video-Video *by* Videography *magazine contributor Jon Leland (*$19.45 *from Communication Bridges, 1994, 800-685-3636), a videotape covering hardware, software, non-linear and on-line editing, and animation.*

For more on camcorder production techniques: video producer Robert Hone's Shoot Video Like a Pro *(*$35 *from Zelos, 800-345-6777).* M+2

videotape, it can have tracks of audio, video, text, and even interactive commands. The result: a movie that can have multiple languages, interactivity, subtitles, and a whole range of possibilities.

rendering time

How long it takes the computer to draw an image: moments to months, depending on the machine and image complexity.

rotoscoping

Each frame of video is painted on individually. Very popular in the movie biz.

special effects applications

Let you peform special effects using digitized clips. Include compositing tools, rotoscoping, and programs that transform the image (morphing).

tape backup system

Records information stored on a hard drive, using DAT or 8mm (Exabyte) tape. Slow, but can store an incredible amount of data (2 to 10 gigabytes) at low cost ($10 - $16 per tape).

time base corrector

A digital processor that automatically adjusts color, brightness, hue, and playback quality, while preventing out-of-synch problems.

video digitizer board

Converts video into a digital signal so it can work in your computer. Some have built-in compression boards. M+2

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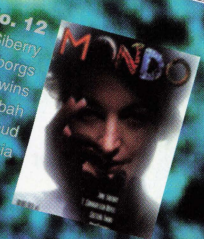

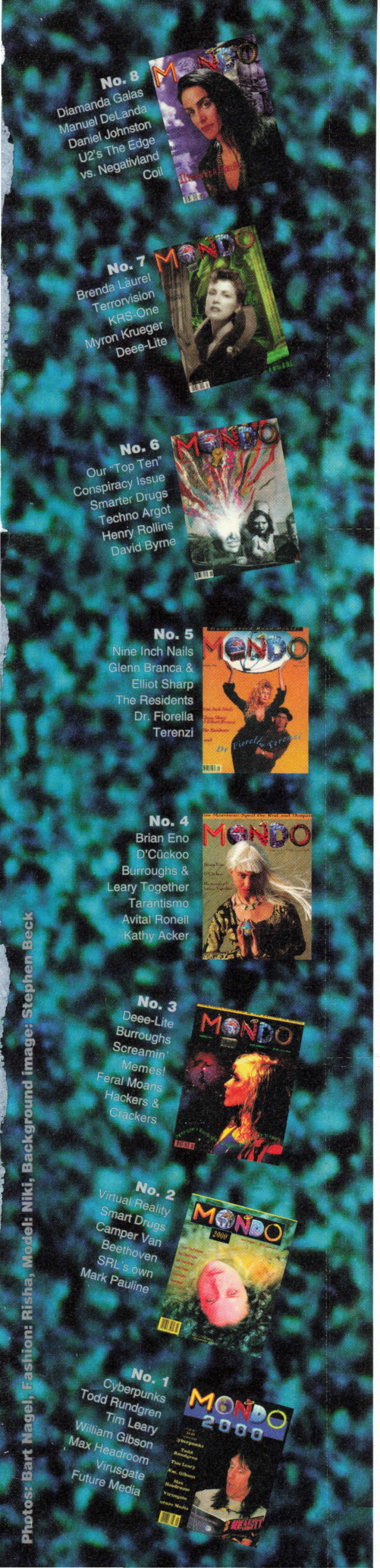

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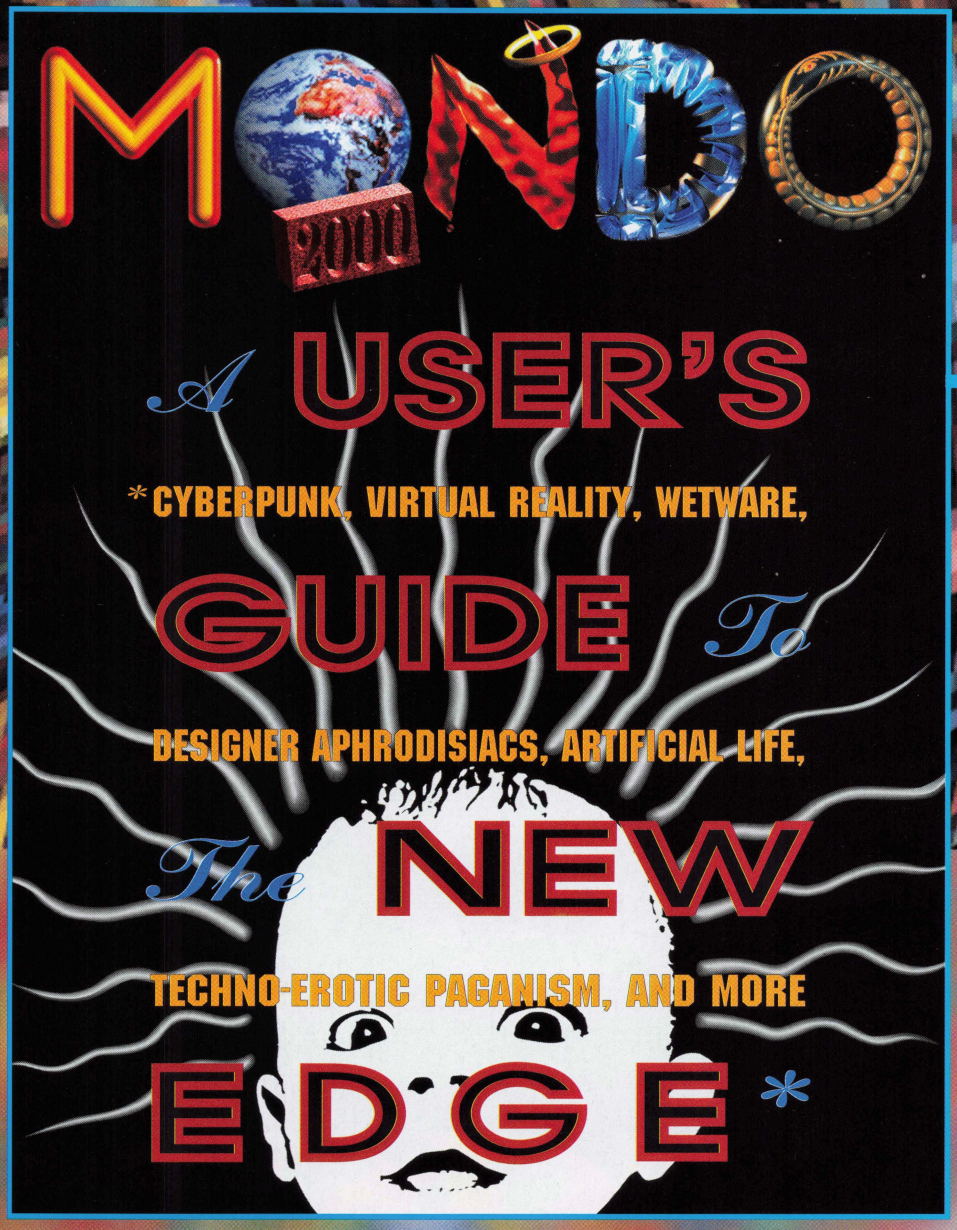

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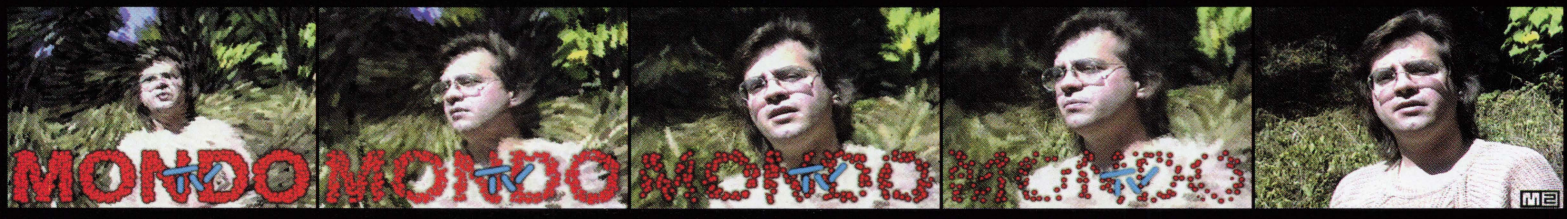
Fractal Design

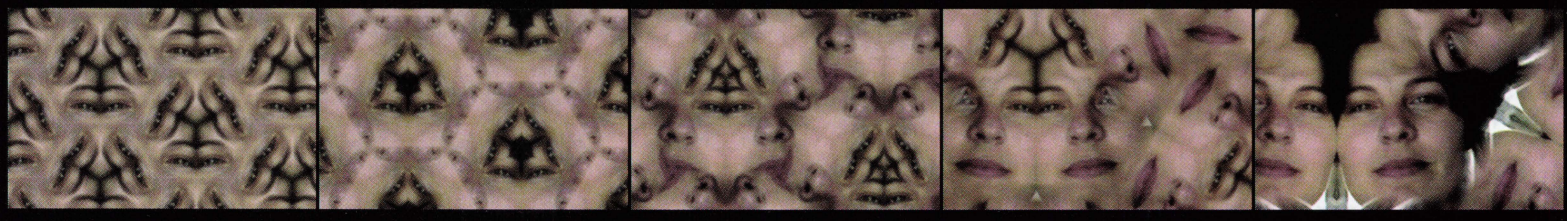
Fractal Design's Dan DiPaola created this rotoscoping sequence using FD3. After shooting the background by itself, the actor walked into the scene backwards and walked off to the right. Dan used the background scene to remove top and bottom halves.

Pennello



Pennello creator Lior Saar extracted MONDO's Jas Morgan from a nasty time warp, using the Radial Oil Transition effect on the background and the Spheres Dissolve effect on the logo.

DeBabilizer

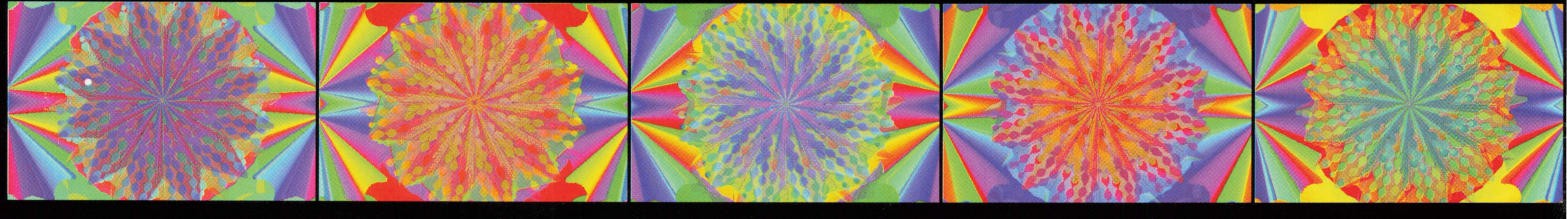


MONDO's Heide Foley emerges intact from a kaleidoscopic jungle, thanks to Equilibrium's DeBabelizer and Xaos' Terrazzo.

Bliss Paint

Bliss Paint features an awesome repertoire of shape and texture generators, image processing filters, and a real-time color synthesizer. You can save sequences as QuickTime movies or screen savers.

Kirei



"I just opened Kirei and clicked on boxes. Things happened. I have no idea what I did. Cool." —a user.

Animation Quik Trix

Ed Wood woulda loved this stuff. Can you imagine an animated *Plan 9 From Outer Space*? A coupla mouse clicks...PRINT IT! This is animation software for newbies and wizards alike. Works for me.

by Wes Thomas

FRACTAL DESIGN 3.0

Probably the easiest way to achieve professional cell animation effects. Most impressive: Image Hose, a paint brush for painting with objects or even QuickTime movies. Colossal Pictures artist Dewey Reed uses it to create exotic backgrounds for Liquid TV. $499 from Fractal Design, 408-688-5300.

PENNELLO

An animatable brushing engine that runs as a 3D Studio (PC) add-on application. It lets you process captured video, animations or 3D scenes, create unlimited brushing effects, animate with control parameters and create user-defined brushes. $995 from Xaos Tools, Inc. 415-487-7000.

DEBABELIZER

The new 1.6 version of DeBabelizer Toolbox for the Mac has a handy Filter Interpolation feature that works with Photoshop plug-in filters and handles both QuickTime (Mac/PC) and still images. You simply create a script, put the Filter Interpolation command in it, specify any Photoshop filter, number of frames, and beginning and ending images and save as a QuickTime movie or other animation format. The filter applies gradually different settings to create the smooth animated effect. $399 from Equilibrium, 415-332-4343.

BLISS PAINT

Lets you create sophisticated animated paintings on a Mac and modify them with keyboard commands in real time. Brian Eno and The Grateful Dead jam with it (MIDI sounds drive images). Its creator, Greg Jalbert performs with it live at D'Cückoo concerts. $79.95 from Imaja, imaja@aol.com or 510-526-4621.

KIREI

Like, flashbacks to the 60's, man: light shows on your Mac with groovy color palette cycling. Also fun for thoughtless random desktop doodling and creating instant video wallpaper. $48 from Dynaware, 415-349-5700.

VIDEO DREAMLAND

More flashbacks. Your PC sound card controls a video kaleidoscope on a VGA monitor. $33 (includes videotape) from Creative Music Coalition, slepian@delphi.com or 800-882-4262.

KPT BRYCE

Lets you create the ultimate sets on your Mac—realistic 3-D landscapes and surreal scenery you can pan around in—animate in QuickTime. Comes with CD-ROM containing hundreds of scenes. $199 from HSC, 805-566-6200. M2

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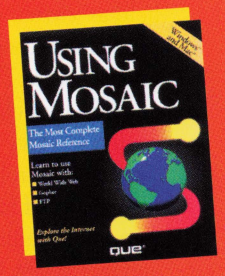

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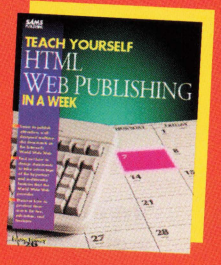

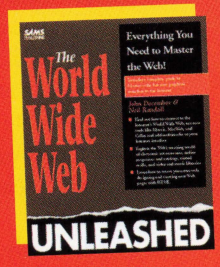

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Over the next couple of years, there is going to be a dramatic increase in two-person outfits producing videos for companies like us, for game companies or little independent record labels or little funky outfits that can get a video produced for 10, 15, $20,000. That they could never do before because there are people out there who can do stuff that's hit and run, that's funky. I think there's going to be growth in that industry. And the other really cool way of getting your stuff out there is on the Net. There's already a web server for independent music; maybe we need a web server for independent video.
—Peter Barrett, Vice President for Development, Rocket Science

The girl is clicking and you see random people on the channels. By the time you get to Channel 55, where most normal cable systems end, it's fuzz, and then we do a close-up of a cockroach that sits on the channel changer to eat a cheeto, then you're up to 3408, 3409, and then 3412.
—Randy James, Wee-BeeTeeVee

There are several avenues for distribution: independent series, AliveTV still acquires a lot of stuff, and there are other cable concerns looking for short pieces. And who's to say that someone who's 19 who's got a good story to tell won't blow us all away?
—John Sanborn, Director of Liquid Television's "*Human Bomb*"

Will the Revolution Be Televised?

AS THE GLOBAL MEDIA BEHEMOTHS WRAP THEIR MIND-INVADING TENTACLES AROUND THE WORLD, MICROPOWER BROADCASTERS ARE POISED TO INVADE THE INNER SANCTUM OF THE MEDIA'S MOST REVERED ICON AND TOOL OF SOCIAL CONTROL—TELEVISION. NOT CONTENT WITH FM OR AM BROADCASTING, MICROPOWER TV TRANSMITTERS ARE NOW APPEARING IN EVER-INCREASING NUMBERS.

by Stephen Dunifer

Consider this scenario: You enter you local politician's or corporate thug's office with a concealed ultraminiature CCD video camera, microphone and low power transmitter feeding video and audio back to a remotely located VCR (100 milliwatt signals are legal). When local TV stations go off the air late at night, you beam your signal to the TV receiving antennas at the local cable facility, using the same frequency as one of the local TV channels being carried by the cable company. Your signal is now seen over the entire cable system.

Or you find places where people are being held as virtual captive audiences (such as prisons and schools) and send your own signal in on a vacant TV broadcasting channel. As an added touch, someone interviews the captives to give them a voice.

Total control of media access is the fundamental tool of fascism everywhere. In Nazi Germany, multiband radios were confiscated and replaced by fixed- frequency units. Today we've got cable-ready TVs which have lost the capability to be easily hooked to an external antenna to receive clandestine or unauthorized signals. Proving that FCC means Fostering Corporate Control, the Federal Communications Commission has reneged on its earlier ruling and has imposed a virtual ban on new low-power UHF TV licenses in the 50 major metropolitan areas—even though there's more than adequate spectrum space available. To make things worse, the FCC may sell off some UHF channels to corporate interests in the near future.

Obviously, their message is clear: cable is the only acceptable means of distributing new material. As a single-point source, cable TV is much more easily controlled and regulated. What about community access channels? Despite promises, in many areas, *forget it*—cable companies are often generous contributors to local politicians.

What's left? DIY.

Tetsuo, one of the founders of the Japanese micropower broadcasting movement, is leading workshops in Vancouver and other Canadian cities on how to build simple VHF transmitters using off-the-shelf video modulators, ICs and transistors. Although limited in range, they show the possibilities. Other folks are building their own units too; Free Radio Berkeley has developed a series of low-cost UHF transmitter kits to be released in early December 1994.

Unlike FM or AM, video signals demand a bit more power from the transmitters. Those who are on a low budget and want to experiment can take the output of a VCR and run it into a antenna distribution amplifier (Radio Shack #15-1113) which feeds a standard VHF (channels 2 to 13) TV antenna via 75 ohm video coax and a 75 to 300 ohm matching transformer. This will yield a fairly high-gain directional signal on channel 3 or 4 that can reach a mile or two.

A short document from Free Radio Berkeley, available for $3.00 and an SASE, details how to use these and other low-cost off-the-shelf components for a basic TV station along with plans for simple antennas. It offers UHF transmitter and amplifier kits with power capabilities of up to 50 watts. All units use frequency synthesis for frequency stability.

Addresses and Contacts:

Free Radio Berkeley, 1442A Walnut St. #406, Berkeley, CA 94709. Phone (510) 464-3041. E-mail *frbspd@crl.com.*

North Country Radio, P. O. Box 53 Wykagyl Station, New Rochelle, NY 10804. Phone (914) 235-6611.

Ramsey Electronics Inc., 793 Canning Parkway, Victor NY 14564. Phone (800) 446-2295.

Electronics Now, Gernsbeck Publications, 500B Bi-County Blvd., Farmingdale, NY 11735. Phone (516) 293-3000.

Another option, particularly if channel 3 and 4 are both used locally, is a UHF video modulator box (for channels 14 to 32). Check your local TV parts store or a ham swap meet. This accepts separate audio and composite-video signals from the VCR and connects to an antenna distribution amplifier, and from there into a UHF antenna. Since UHF frequencies are much higher (470 MHz and up), antenna elements are much smaller. A UHF TV antenna such as Radio Shack #15-1660 can be used with 75 ohm feed cable and a matching transformer. Cable lengths must be as short as possible to avoid excessive signal loss. A compact yagi antenna with four elements will give the signal an added gain of 10 in the direction the antenna is pointed, with a coverage swath of about 45 degrees.

The July/August 1994 issue of *Electronics Now* has a two-part article on building UHF TV transmitters. North Country Radio offers the kits that go along with the article. Another kit supplier, Ramsey Electronics, offers a low-cost tunable VHF transmitter kit.

By adding a linear amplifier (between distribution amplifier and antenna), the range can be increased quite a bit. It's very important to use Class A full linear RF amplifiers. Other types (class B and C) will introduce nonlinearity, resulting in interference and severe distortion of the video signal.

For more information on guerrilla video, contact Paper Tiger and the alternative distribution network Deep Dish TV. M2

Paper Tiger TV, P. O. Box 411271, San Francisco, CA 94141. Phone (415) 695-0931.

Deep Dish TV, 899 Lafayette St., New York, NY 10012. Phone (212) 473-8933

CREATING VIDEO FOR THE World Wide Web

THE FIRST PART IS EASY: USE YOUR TOASTER, MAC, OR PC AND PRODUCE A PIECE OF COMPELLING VIDEO. AT SEVERAL MEGABYTES OF SIZE —EVEN FOR JUST A FEW SECONDS— IT'LL *HAVE* TO BE AMAZING. OTHERWISE EXPECT ANGRY E-MAIL FROM PEOPLE WHO FEEL YOU'VE WASTED THEIR TIME AND BANDWIDTH.

by Mark Pesce

Now it gets harder. How do you distribute your opus so that everyone on the Net can watch it? Unfortunately, there is no one standard for video interchange, and unlike GIF viewers which exist on practically every computing platform known, different formats have emerged on each of the major platforms. Although Apple's QuickTime is gradually being adopted as a multi-platform standard, it still isn't everywhere (but it will run on Macs, PCs, and some UNIX boxes). MPEG, although relatively ubiquitous, doesn't synchronize sound to the video, and generally requires specialized (read expensive) software or hardware to produce. AVI and FLC formats only run on the PC, for now, and everything else is so specialized it will severely restrict access to your creation.

OK, now you have to package it up. Macintosh files need to be "flattened" (resource and data forks combined), so that they can be read by other operating systems. Carefully pick a file "extension" that is MIME (Multimedia Internet Mail Extensions) compatible. Use .mpg for MPEG, .qt for QuickTime, .avi for MS-VIDEO, and so forth. You can find a directory of these types at: *http://www.ncsa.uiuc.edu/SDG/Software/Mosaic/Docs/extension-map.html*. Remember that file names with spaces in them will give both UNIX and DOS users heart palpitations.

If it's a big file (> 1 MB), you want to warn people before they download it, in case they're connected via modem. (Nothing like waiting two hours for that clip of a NIN video that you really didn't want to see that badly.) Make a note of the content, size, and viewer required. If there's anything at all weird (any special requirements) about what you've done and how you've done it, say that first. M2

We're getting a T1 connection to explore the net with realtime video. Downloading little MPEG files that are 15 frames per second on my 9600 modem is pretty painful, but that's part of the art. Make something that's cool in 15 seconds. If you want to reach somebody, make it tiny.

—Peter Barrett, Vice President for Development, Rocket Science

I don't want to have to go to the big studios. It's both a financial and an aesthetic risk. Digital video means I can fuck up and try new things. Instead of being in an online studio at hundreds of dollars per minute, I have a free range to explore on a number of levels. And they keep making it better and better.

—John Sanborn, Director of Liquid Television's *"Human Bomb"*

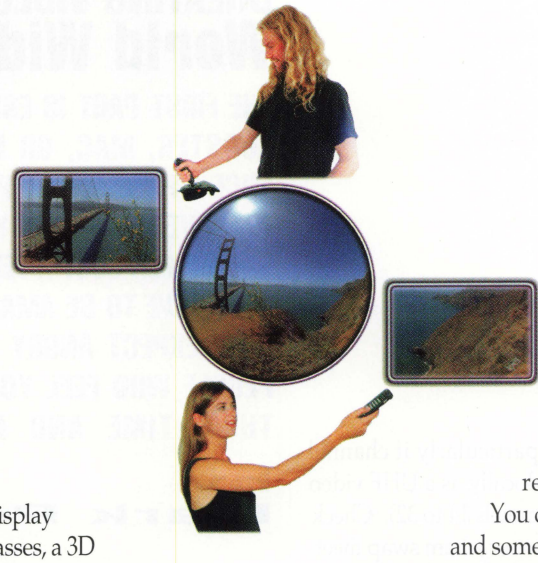
We do it with Silicon Graphics on an Indigo. To have backgrounds as complex as the ones we made, you have to be able to texture wrap, and that ends up taking lots of crunching time. It is more than a Mac could handle.

—Eli Noyes, Director of Liquid Television's *"The Blockheads"*

VR TV

LET'S FACE IT: YOU WERE DISAPPOINTED WITH VR. YOU EXPECTED AN ARMCHAIR VR SYSTEM WITH AMAZING HIGH-RESOLUTION TV-QUALITY GAMES, PERHAPS WITH A TELEDILDONICS OPTION. YOU GOT EL CHEAPO WIREFRAME IMAGES AND PSEUDOCYBER-SEX CD-ROMS.

by Wes Thomas



Warp's VTV: multiple viewers can choose their own views in real time from a single fisheye video image. *Photoshop design by Ammon Haggerty.* Photos by Glen McKay.

Well, cheer up. Virtual I/O is coming out (just before Christmas) with their Personal Display System (PDS) i-glasses, a 3D television viewer for under $400. The prototype glasses I tried on delivered a definite "wow." Two miniature LCD TV screens on a lightweight (under seven ounces) visor created the illusion of a giant 80-inch 3D projection TV ten feet in front of me, superimposed on the real world.

Plus there were built-in headsets with very decent stereo sound. Unlike the overhyped monocular, eye-straining Virtual Vision visor, this had a nice clear TV image.

By early 1995, Virtual I/O VP Linden Rhoades assures me, "we'll see test programming of 3D over existing cable channels. The Playboy channel would be real good in 3D, and that's the innocent end of things. We'll see first-run movies coming out not in the theater but over cable, because that'll be the preferred way of presenting first-run movies in 3D instead of cheap movie glasses. Or you'll be able to watch a prizefight or a football game in 3D." Right—new ways to deliver brutality to the living room.

So what does this have to do with VR? Well, Linden claims a headtracking option is coming out in '95 that will convert the PDS i-glasses into a full-fledged head tracking VR peripheral for under $799. They're also coming out with a game version, PDS Gamer, priced at under $250. This one is mono only but the head tracking motion sensor is built in. "Most of the major game developers are working on 3D games now, and I think in '95 you're gonna see 3D and VR games for both PC and electronic gaming platforms," says Linden.

The PDS i-glasses will be able to be programmed for what Linden calls "augmented or fused reality"— to be see-through or not on a pixel-by-pixel basis. Depending on the game, "you could have real hands and fake worlds popping out at you. You won't even know which elements are real and which aren't. You could be reaching in and some of the things you're touching would be real and some could be utter figments."

In other words, the real world and the television/computer graphics world will merge. Gee, I thought they already had around the time I started watching MTV.

ULTIMATE REMOTE CONTROL

Speaking of melding, the i-glasses/head tracking version works great with "Virtual Televiewer" (VTV) from Warp California Inc., cofounded by ex-Sense8 founder Eric Gullichsen and Susan Wyshynski of Vivid/Mandala fame.

VTV scored another emphatic "wow." I'm watching a street scene on an ordinary PC color VGA monitor, with full-screen 30 fps video, OK? I reach down and jiggle the mouse. Suddenly I find myself panning around the street and looking behind me!

So what does this mean? Instead of passively watching TV, you'll be able to pan/tilt/roll/zoom and select the POV you like. Sort of like remote camera control. I like that.

But how the hell does this thing work? Eric explains: "The producer tapes the scene with a fisheye lens. The video is compressed and stored on hard disk or CD-ROM. When you play it through your PC, the VTV software displays just the part your joystick or remote control is looking at and dewarps the image." Keep in mind, this works with an ordinary 386 or better PC—no special cards needed.

For the Mac, there's Apple Computer's QuickTime VR, which is also neat, but more limited—pan only, 7 frames/second, and looks like it will be out real soon now (many months away).

Even more interesting, Warp is talking to major cable networks and we can expect live VTV programming over cable TV next

Premiere is something that is really approachable and really easy—it's a great tool for learning about the medium. And that's combined with one of the lowest cost video capture cards—there are some pretty good JPEG ones from SuperMac, or Radius—start with like a $600 or $700 video capture card as opposed to a $4,000 Video Vision card. Start small and start at low-res so the disks are manageable and Premiere can assemble it in a reasonable amount of time. Muck around with that stuff.

—Peter Barrett, Vice President for Development, Rocket Science

Premiere is the most elegant, interesting computer tool; it looks like a symphony on the screen.

—John Sanborn, Director of Liquid Television's *"Human Bomb"*

We used Photoshop filters to distort the face a little and stretched it onto the box that was the head. We put a single digital frame of the ears on the sides of the head and some hair on top, and discovered that suddenly there was some soul there, which was totally surprising. I never saw that in computer animation before.

—Eli Noyes, Director of *Liquid Television*'s "The Blockheads"

year. You'll need a special settop box (or PC with a cable modem). "All subscribers will receive the same warped fisheye signal, digitally compressed, to your home," explains Eric. "There the video is decompressed in real time and dewarped by the settop box for display on your TV set," he says. This scheme would also work with VHS tapes.

Remote control freaks, please note: imagine watching a live football game and aiming the RC or joystick to see the action from exactly the camera angle you want to see, not from some braindamaged sportscaster's POV. Or a murder mystery where you get to pan around the room for clues. This has infinite potential for violent family arguments.

We're talking live TV here, not ersatz computer-generated images. This is reality programming at its best, or worst, depending on your metaphysics.

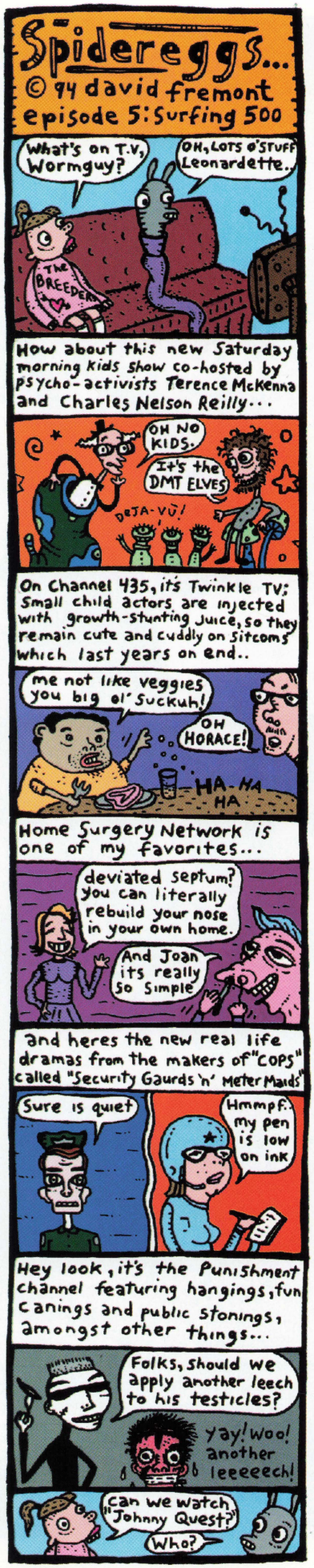
For computer gamers, VTV offers other intriguing possibilities. "A game developer could videotape concentric laps around a race track, using a fisheye lens, repeating this for each lap," enthuses Eric, who looks and talks sorta like a nerd surfer. "The player could then pan around with the joystick to see other cars in the race. With the Virtual I/O headmount display, they wouldn't even need a joystick—they could just look around."

For game developers, this is a hell of a lot cheaper—and far more realistic—than having to create a game solely with computer graphics. Imagine a hyperrealistic flight-sim game that uses real-world video, or a travel adventure game that puts you right inside an action spot like Haiti, with live interactive 3D news feeds from CNN.

Just to blur reality even further, you could be inside a 3D music video controlling the action by just looking around, using VTV plus PDS i-glasses. The imagination boggles.

You can find Warp California at: taz!warp@well.com, fax 415.332.8003, or download info by ftp at warp.com in the /pub directory. Virtual I/O is at vio@halcyon.com or (206) 382-7410. M2

The debut CD contains fifty-three minutes of ingenious "composite rock" audio for all CD players, as well as CD-ROM exclusive movies, graphics, and songs for your computer's CD-ROM Drive.
Download samples and order CD's through:
Kaleidospace (Web: http://kspace.com)
IUMA(Web: http://www.iuma.com/index.html)
BBS 703-471-5403 HouseMac
or voice 703-979-IBOX
Featuring: No Sex for Christmas!
icom·pos·ite a recording label


Spidereggs...
© 94 david fremont
episode 5: Surfing 500
What's on T.V, Wormguy?
OH, LOTS O'STUFF Leonardette.
THE BREEDER
How about this new Saturday morning kids show co-hosted by psycho-activists Terence McKenna and Charles Nelson Reilly...
OH NO KIDS.
It's the DMT ELVES
DEJA-VU!
On Channel 435, it's Twinkle TV; Small child actors are injected with growth-stunting juice, so they remain cute and cuddly on sitcoms which last years on end..
me not like veggies you big ol' Suckuh!
OH HORACE!
HA-HA HA
Home Surgery Network is one of my favorites...
deviated septum? you can literally rebuild your nose in your own home.
And Joan its really so simple
and heres the new real life dramas from the makers of "COPS" called "Security Gaurds 'n' Meter Maids"
Sure is quiet
Hmmpf. my pen is low on ink
Hey look, it's the Punishment channel featuring hangings, fun canings and public stonings, amongst other things...
Folks, should we apply another leech to his testicles?
yay! woo! another leeeeech!
Can we watch "Johnny Quest?"
Who?

WEB TRIPPING

So Mosaic is buggy and slooooow. Whad'ya expect—Modzilla? But more robust versions are coming down the line.

The original Mosaic was designed by nuke supercomputer whizzes for other whizzes. It was phenomenal for its time. Now its functional limitations have been transcended by a new generation of souped-up Mosaic clones. Commercial software developers have moved into this terrain and here are some of the best new contenders. by Mark Pesce

- MacWeb for the Mac is a Mosaic-style browser that's smaller, faster, and more stable. Free by FTP from ftp.einet.netcd/einetmac/macweb/macweb.latest.sea.hqx or from WWW URL: ftp://ftp.einet/mac/macweb/macweb.latest.sea.hqx.
- Internet-in-a-Box for Windows from O'Reilly ($149, 800-557-9614) includes an improved Mosaic clone for Windows.
- Mozilla ("Mosaic NetScape" if you must be formal) for Windows, Mac, and UNIX never makes you wait. Those huge GIF images assemble in the background while you continue to cruise Webspace uninterrupted.

Mozilla has RSA encryption built in and extensions to HTML (the language for designing web pages) for snazzier page layout. The drawback: they're non-standard, so we're seeing the first collapse of unified Webspace into the idiocy of proprietary designs. Available free from FTP site: ftp.mcom.com. More info: Mosaic Communications Corporation (800-NET-SITE).

- Sesame from Ubique Corporation (415-896-2434) for Windows and UNIX, brainchild of a group of Israeli Ph.D.s, is something quite different and remarkable. You'll see yourself represented as a small icon on whatever Web page you happen to be browsing. If it's being visited by other Sesame users, you'll see their icons too, and they, yours. You can now engage in a keyboard chat or—if you've got the bandwidth—a full voice conversation. Neat. And neater still, you can create a "magic carpet," drag the other persons' icons onto it, and take them on a trip through Webspace. Wherever you go, they'll follow. This has endless applications. But needless to say, the notion of the Casbah has already been commercially vulturized. Ziff-Davis has built a "virtual trade show" using Sesame. You can now visit a product show room anytime and be assaulted by waiting salespeople. Terrific.
- 3D browsers of course are what we really need. In fact, a new tool for creating 3D Web browsers has just emerged: Virtual Reality Modeling Language (VRML). VRML is a programmer's language for defining "scenes" (descriptions of shared virtual worlds) and a way to connect objects in these scenes to anything else in the Web, including other scenes.

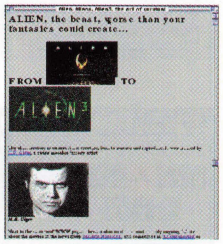
For example, you could create a virtual library building and stock its shelves with books that represent links to the information available in the Library of Congress web site. Or you could represent multiple linked sites. Maybe use PDS i-glasses and VTV (see "VR TV" sidebar) to create a you-are-in-control metaverse à la *Snow Crash*.

We could create a real, live Earth on your desktop that would take satellite environmental data, massage it, and wrap it onto a sphere that represents the planet. Or model the solar system, then connect it to the enormous image and data archives at NASA and other sites. Glue it to a MOO, and create a space you can see as well as read.

VRML info is available from ftp site: eit.com or the VRML home page: http://www.wired.com/vrml/.

No matter where you go, there you are. WELCOME HOME PAGES are some inexplicably weird torches burning from Web servers, welding digital art and mainstream cyberculture into a medium that can address more than the Almighty Digit. These places are less than pagan and more than civilian. This sort of renegade and quickly reproducing art will continue to grow and develop until there

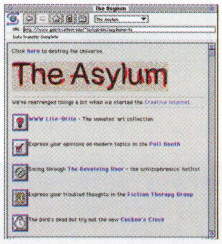
by Mark Meadows



ALIENS

http://www.twi.tudelft.nl/~vos/alien.html

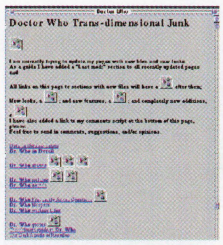
...As in the movie. Vicious pictures and movie clips.



THE ASYLUM

http://www.galcit.caltech.edu/~ta/cgi-bin/asylhome-ta

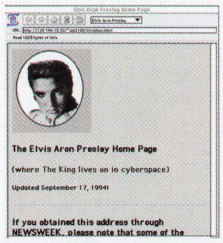
A soothing interface and therapy for those with minor mental illnesses. Visit Wysiwyg, the hospital's mascot.



DR. WHO HOME PAGE

http://www.phlab.missouri.edu/ccpeace_www/Dr.Who/

Somewhere near Dr. Who...an other-dimensional cosmogony.


The Elvis Aron Presley Home Page
(where The King lives on in cyberspace)
Updated September 17, 1994!
If you obtained this address through NEWSWEEK, please note that some of the

ELVIS AARON PRESLEY HOME PAGE

http://128.194.15.32/~ahb2188/elvishom.html

The unofficial Elvis Presley home page.

FEMMES JE VOUS AIMES

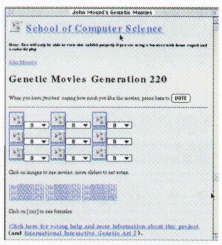
http://www.cnam.fr/bin.html/imageWWW

Ooh la la. StraightManSoftPorn on the Web—free.

GENETIC MOVIES

http://robocop.modmath.cs.cmu.edu:8001/htbin/moviegenform

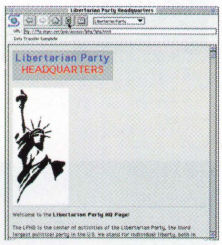
Aesthetic Digital Darwinism. This "genetic art" experiment involves immaculate scriptwriting—video clips that you view and vote on, and in so doing, change the formula that produces them.



KARUME INSTITUTE OF JAPAN

http://www.karume-it.ac.jp/

Microcomputing technology focus, but the note listed at the bottom of this page, "Japanese massages [sic] are here," reminds us that English isn't the Web's only language.



LIBERTARIAN PARTY HQ

ftp://ftp.digex.net/pub/access/lphq/lphq.html

Gun control, taxes, and the War on Drugs. Free snailmail package, too—join today!

MANIMAN

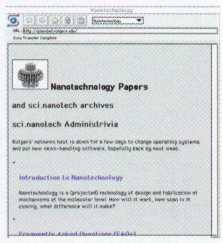
http://www.well.com/Community/Mike/

Big graphics, image-mapping, and amusing autobiographical tidbits.

MKZDK

http://www.roadrunner.com/~mkzdk

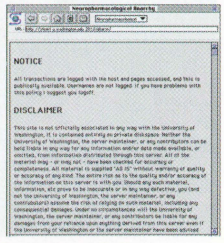
Abstract neurofunk from a mysterious figure running pages of "techno shamanistic huntings" off a server in New Mexico.



NEUROPHARMACOLOGICAL ANARCHY

http://stein1.u.washington.edu:2012/pharm/

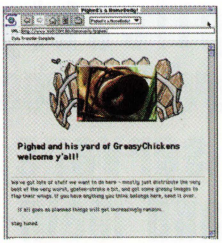
Drug info and serious approaches to alternative consciousness.



NANOTECHNOLOGY REFERENCES

http://planchet.rutgers.edu/

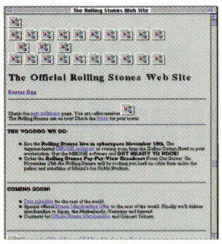
Excellent nanotechnology reference info.



ftp://parcftp.xerox.com/pub/nano/nano.html
Xerox PARC nanotechnologist Ralph Merkle's site.

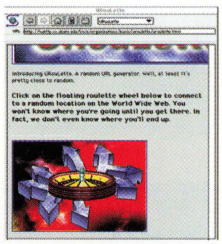
PIGHED'S HOME

http://www.well.com/Community/pighed/
My own home. Among other atrocities: entire illustrated book, three galleries of visual riff-raff, essay on evolution, and turbulence photo.



THE ROLLING STONES HOME PAGE

http://www.stones.com
Video and audio clips, photos, merchandise.

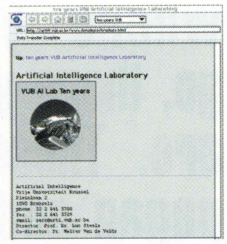

Click on the floating roulette wheel below to connect to a random location on the World Wide Web. You won't know where you're going until you get there. In fact, we don't even know where you'll end up.

UROULETTE

http://kuhttp.cc.ukans.edu/cwis/organizations/kucia/uroulette/uroulette.html
URL-ette, Las Vegas-style. Can't-go-wrong-gambling. Randomly chosen, sometimes delightfully stoopid sites. Add your own URL to the list so those who arrive afterwards can visit you too.

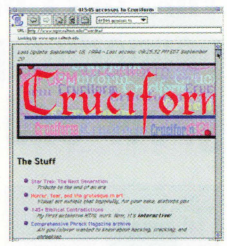
VUB'S ARTIFICIAL INTELLIGENCE SITE

http://arti9.vub.ac.be/www/brochure/brochure.html
Vrije University's AI lab site in Brussels.



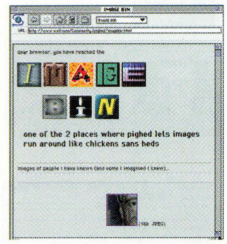
WERDNA

http://www.ugcs.caltech.edu/~werdna"
Werdna (could it spell "andrew" backwards?) has devoted his life to the Web. Replete with a massive hotlist, this site evolves every week.



OTHER LISTS

http://www.clark.net/pub/listserv/listserv.html
Handy reference pages with lists grouped by topic.



If other sites need ventilating, let me know: pighed@well.sf.ca.us
http://www.well.com/Community/pighed —> mail.html

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INTERNET TV

THINK OF IT AS A CROSS BETWEEN VIDEO TELECONFERENCING AND BROADCAST MEDIA.

by Wes Thomas

It's called CU-SeeMe and it's the most fun I've had on the Internet yet. It's free video conferencing software that lets you hold a videoconference with seven other people just about anywhere. Just plug a camera (I'm experimenting with VideoLab's nifty Flexcam, but you can use any old cheapo surplus monochrome video camera) into a video capture board (VideoSpigot recommended) in your Mac or PC, fire up your SLIP Internet-access software, and select a "reflector" (one of a dozen or so computer sites around the world), and smile! You're on global Candid Camera.

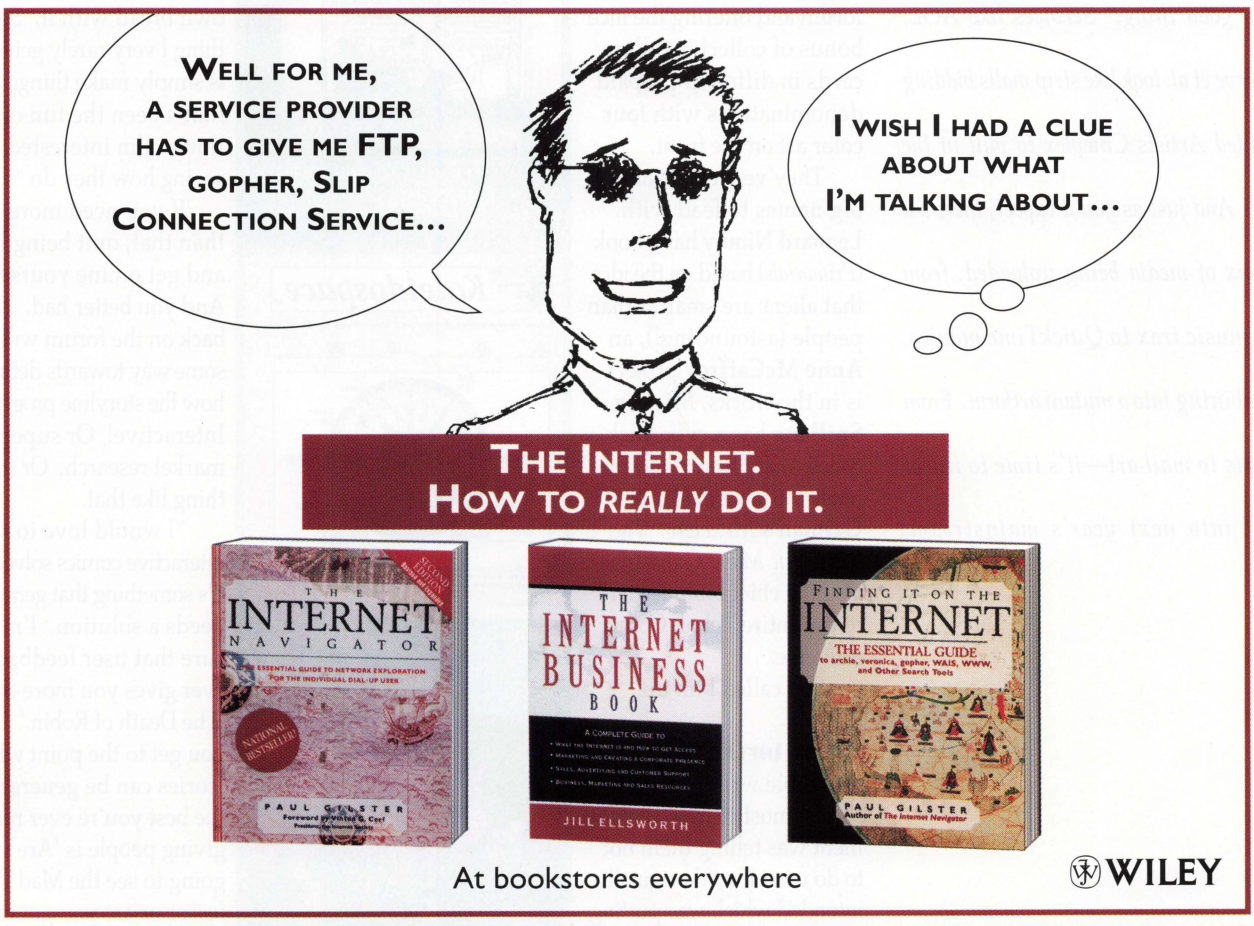
MONDO Tokyo correspondent Joey Ito is using CU-SeeMe fed by a VCR to produce "EccoTV" via the Internet, showing cool things happening in Tokyo. The Eden Matrix guys are experimenting with it to "broadcast" raves.

Only problem: speed. Using a 19.2 Kbps modem connection, I clocked it clunking along at 1 frame per second. If you want smoother motion you'll have to ante up for ISDN—or a T1 line if you have Really Big Bucks. Be aware that with a modem, you'll be slowing down high-speed users to a crawl. (Developer Richard Cogger says a version for modems is coming.)

But who cares? It sure beats $10,000 videoconferencing systems...or those chunky-pixeled cheapo Panasonic videophones we used to use (both also required you to set up an expensive conference call on a conference bridge). Now you just pick your reflector, make sure it's going to be "on the air," announce the conference (or "TV show") on the net, and dial up via modem.

There's also a sound program called Maven built in the Mac version of CU-SeeMe.

You can download CU-SeeMe free via ftp at *gated.cornell.edu /pub/video.* You'll also need a SLIP or PPP account with your Internet service provider. To join the CU-SeeMe mailing list, send a message to *listserv@cornell.edu* with the text "subscribe cu-seeme-l <your first name> <your last name>" in the body of the message. Cogger requests you check the README files on the FTP site "before shouting for help." M2


WELL FOR ME, A SERVICE PROVIDER HAS TO GIVE ME FTP, GOPHER, SLIP CONNECTION SERVICE...
I WISH I HAD A CLUE ABOUT WHAT I'M TALKING ABOUT...
THE INTERNET. HOW TO REALLY DO IT.
THE INTERNET NAVIGATOR
PAUL GILSTER
THE INTERNET BUSINESS BOOK
JILL ELLSWORTH
FINDING IT ON THE INTERNET
THE ESSENTIAL GUIDE
PAUL GILSTER
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DIVING *for* DOLLAR$

As an artist, your biggest enemy is the blank screen. Next in line are the blank stares you get when you pitch the product. Short of selling yourself *on the casting couch, your lifeline is the online (see* Terminal Music Biz, MONDO #12*). Because the online has decided to capitalize on the death of print and—while Viacom sharks rule the cable—the dearth of decent TV shows.*

Online delivery operations are popping up like condoms on the beach. When the Online BookStore in Rockport starts selling lobsters on the side, there's no surer sign that the Internet is evolving into a market of street stalls, barkers and artists of the slightly dodgy deal. This can only be a good thing. Services like AOL, Compuserve et al. look like strip malls bidding for a United Artists Cineplex to pull in the shoppers. And just as you'd expect, there's a blurry mix of media being uploaded, from comix to music trax to QuickTime movies, all recombining into a mutant artform. From mall marts to mail art—it's time to inject yourself into next year's mainstream.

by Paul McEnery
Illustration by Mark Landman

COMIC BOOKS GET THE BIG E

And, for that matter, familiarize yourself with next year's networks, because there's some deep negotiation going on. Compuserve has picked up Malibu Comics, the first company to spot the Multimedia trend and issue product on CD-ROM, and AOL has DC Comics, the first comix company to get a BBS. But both of these give you little more than remaindered items for the fanboy.

Prodigy is trying a little harder. It's signed an agreement with Big Entertainment and the new venture, launching in October, is called Tekno Comix—a new line of books closely linked to an online forum and offering the nice bonus of collector calling cards in different prepaid denominations with four color art on the front.

They've picked some big names to lead with. **Leonard Nimoy** has a book (*Primortals*) based on the idea that aliens are smarter than people (astounding!), an **Anne McCaffrey** project is in the works, **Mickey Spillane** has a cyberdick called *Mike Danger*, and the hotsy totsy big deal is **Neil Gaiman**'s *Mr. Hero: The Newmatic Man*. Gaiman is also the chief bible writer of the entire Tekno Comix universe.

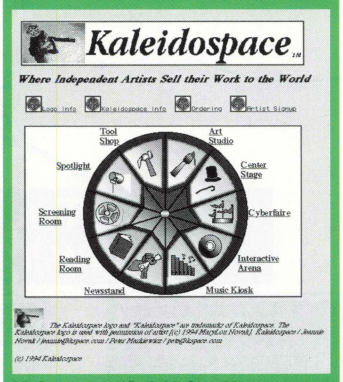
So I called him up.

YEAST INFLECTED

"As Bible writer for the series, most of my involvement was telling them not to do what they'd originally intended which was putting all the things that they had into one coherent universe. I had to kind of explain it to them that mixing Mickey Spillane with Leonard Nimoy would be like mixing fine wine with high octane petrol—it would give you something you could neither drink nor put in the tank of your car."

Not that any of the big names are going to have to actually work themselves. Nuh-huh. They've got a veritable South Korea of talent at work in the back room—Bill Sienkewicz, Max Allen Collins, Keith Giffen, Rick Veitch.

Underground and online: Ariel Bordeaux's *Deep Girl* on the Eden Matrix.



K-Space: dial H for Hero.

Big hat, big teeth, Big Entertainment. *Technophage* at Tekno Comix.

"What I wound up giving them essentially was some yeast and they're going off and making their own bread with it. Something I very rarely get to do is simply make things up—that's been the fun of this thing. I'm interested in seeing how they do."

If you need more info than that, quit being lazy and get online yourself. And you better had. Feedback on the forum will go some way towards defining how the storyline progresses. Interactive! Or superior market research. Or something like that.

"I would love to see interactive comics solved as it's something that genuinely needs a solution. I'm not sure that user feedback ever gives you more than 'The Death of Robin.' Until you get to the point where stories can be generated, the best you're ever really giving people is 'Are you going to see the Mad Professor or are you going to see the Gorilla, secure in the knowledge that after

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The Multimedia Journal of the Eclectic

SYNAPSE

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you see the Gorilla, you're going to have to go back and see the Mad Professor anyway?' Behind it all, someone is pulling the strings. The interactivity is apparent rather than actual, shall we say."

Be that as it may, if you don't get online, you miss part of the story. Characters will be introduced online—some will stay exclusively virtual and some will do as they damn well please with your screen. Whether you like it or not. Secret codes in the books open trapdoors in the forum. And when you all are good and tired of having living/breathing culture crammed down your throats, the whole shebang gets downloaded to a CD-ROM for people who like their interactions strictly prearranged and formal.

In a real sense, this makes print nothing more than an empty (if beautiful) husk from which the spirit has flown. The books will be the macguffin and the online service the real McCoy. And if you don't have access, not to worry. Kids with no more than quarters in their pockets will be encouraged to jack-in at the arcades at kiosks that switch between games and the Tekno Comix forum.

And they're not just insinuating themselves into real live shopping malls. A deal with Bell Atlantic is instituting an electronic daily comic strip on the testbed digital fiber-optic network in Dover Township, NJ. What's more, Fox is apparently interested in getting Prodigy up on cable TV is some form or other. That's only too fitting, since the money for Tekno Comix was raised by selling up the founders' stock in the skiffy channel. So perhaps we've got more animation to look forward to than re-runs of antique British puppet shows.

Breath of Breton

A similarly big-name project has an even higher degree of interactivity. Kaleidospace's AIR (Artist-in-Residence) program provides the beginning of a story, musical work, video or graphic novel to which Internet users contribute the next stage. The resulting collectively produced work will be displayed, copyright-free, on Kaleidospace's World Wide Web site along with information about contributing artists.

It's kicked off by David Brin and P. Craig Russell. Brin wrote chapter one, while Russell has only had to come up with three panels apparently, which is the easiest creative contribution I've ever heard of outside Hollywood. From there on in, it's up to you to pad the thing out, although you do have to get past a "Consistency Jury" who presumably check your art to see if it's too much like soggy suet. The follow-up will be with Brad Laner of Medicine showcasing unreleased material and poetry. To interact, just get fat and drunk and die in Paris.

Just in case you have a sneaking suspicion that this is some sort of a hook to draw you in to a geek QVC—it is. Blurring the line between what you can order through them and what you can actually download, this seems more of a catalog than an opportunity to interact: "We have ten rooms in our kaleidoscope wheel on the front page of our site, including Center Stage which is mostly perfomance videos, Cyberfaire for multimedia samples, a Reading Room, a Newsstand and a Tool Shop where you can get multimedia tools like sound archives and lipstick cameras."

To contribute to the AIR project, access Kaleidospace's World Wide Web site: *http://kspace.comor*, or ftp site: *ftp.kspace.com* or send submissions to:

Kaleidospace, P.O. Box 341556,
Los Angeles, CA 90034.
Vox: *(310)399-4349.* Fax: *(310)396-5489.*
E-mail: *editors@kspace.com.*

Gardeners' World

Let's cross the tracks to the other side of town. Anyone can explore the Eden Matrix BBS through a local Austin phone number *(512)478-9963* or by telneting to *eden.com.* Subscribe for seven bucks; or (from Austin) make it your Internet gateway for twelve. Access electronic zines or order print by mail, e.g. get The Levellers' zine *On the Fiddle,* and send the band e-mail. And you get *Music Online,* a zine with audio and/or QuickTime and Macromind Director clips.

Eden Matrix is also the name of a cybercomic from Adhesive Media—who brought you *Too Much Coffee Man*—featuring lots of bodyless zipping around and raging against the political machine. The lead character is a guy called Trace who wants to find out why he got his head cut off. As one does. You can't read the story from multiple points of view online, but you can reconstruct Trace's memory files in whatever sequence to figure things out for yourself. Again, the books are sources of secret code, this time to get you free stuff. There's also the intention to developing MOO-based storylines and incorporate vidclips into the comix as soon as it becomes feasible.

Where Tekno Comix are corporate heavyweights, Eden Matrix is the friend to (other) indies. There's a mart for mini-comics you'd probably never see anywhere else, and you can also access digital ashcans—small clips

from underpromoted gems like *True Swamp*, *Girl Hero* and first and foremost, *Deep Girl*. Larger indie publishers are having words and may have joined in by the time we go to press.

Chip Mosher's motivations are pretty clear. "*Deep Girl* is my flagship demo because of the metal-orientedness of the Internet. We're definitely trying to attract a different crowd that really aren't into all that ordinary sex stuff. I mean, pornography made the VCR and it'll probably make the Internet, but that's why I got *Deep Girl* online first, so I could attract the people that aren't masturbating in front of the computer screen."

Word to your Sponsor

Wherever decent people meet to guarantee free speech, you can be sure some huckster will be sneaking in the back door to make a buck off the deal. Gung ho and commercial, Orange Distribution, Inc. is totally cutting its ties to the flesh. "Broadcast and printed communications will be obsolete by the end of the century, and we're here to facilitate that," says Dave Skwarczek. The joy divisions of the operation are an e-zine *Brian* [sic] *Magazine*, and Planet Starchild, a BBS with graphics and sound where you can download music and video, mostly from Chicago bands. The digital shill is one "*bianca* [sic] *Troll*" who you may have seen at Lollapalooza this year flogging off "digital goodies" from an "interactive anarchic shack." Which pretty much sums it up because Orange Distribution's priority is to make a killing as a digital advertising agency.

"Bulova watches had enough guts to budget the cash for the very first television ad back in 1941. Fifty three years later, they're one of the largest watchmakers in the world. If you check out the online world's growth statistics and expanding demographics, your jaw will hit the ground. Anyone taking advantage of this medium will clearly establish themselves as market leaders."

Some say "the Truth will set you free," some say "*Arbeit macht frei*," but these days liberty is bundled in with leisure and information. "Digital advertising is way personal and hype-free. Consumers choose to spend time with an advertiser in this medium, so advertisers now have to market on the consumer's terms." If you say so, Dave. To reach Streams Interactive Online Marketing, "a subsidiary dedicated to the design and implementation of holistic advertising on the Internet," point your Web browser to Orange Distribution's page at: http://*www.mcs.com/~talon/home.html*.

Quid Pro QVC

Tired of paying the late Bill Graham four bucks every time you see a show? Then quit using Bass and use Sonic.Net instead. Sonic.Net grew out of Tim Nye's Thread Waxing Space in New York. A gallery, a club, a multimedia event—perhaps it's not too surprising that Sonic.Net turned out to be a hipster's Sears catalog, a BBS that features ticket sales, A/V clips, a Singles Shop, Internet access, etc., etc.

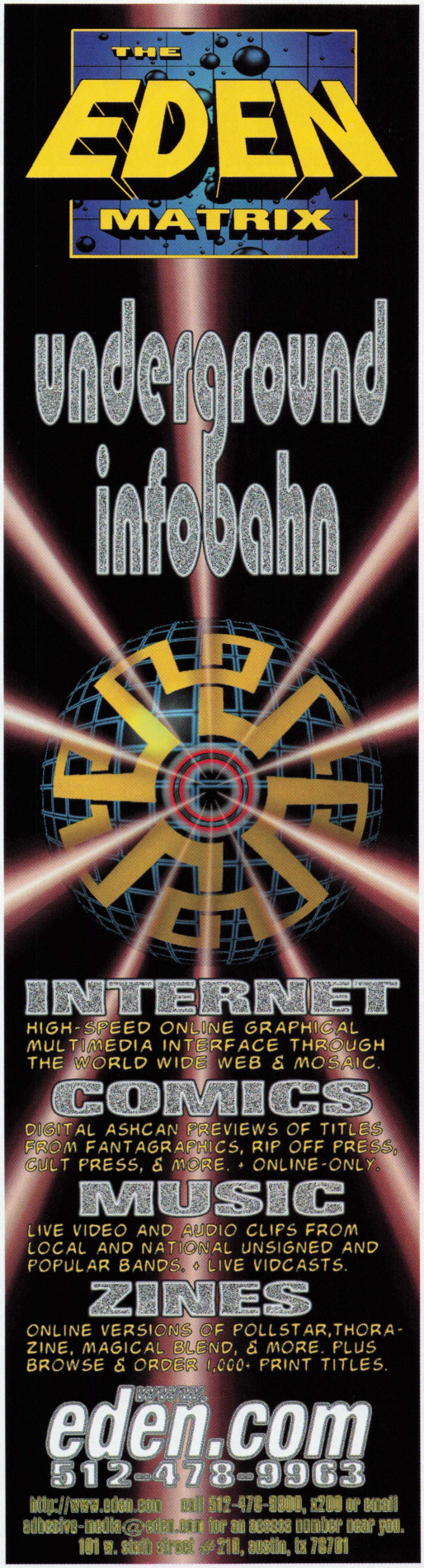
Ticket sales to gigs are the heart of the service. You give them your credit card number and tell them where you're delivering yourself to entertainment. They pass on the information and the tickets work like will-call. Simple! But currently only available for clubs in New York. That *is* where they've got connections, but the global nature of the net will surely have its way.

First company to utilize the Singles Shop (music, and not some Virtual Valerie clone for the sticky keyboard set) is Caroline Records, who are also releasing exclusive tracks for download. There's a newsstand where you can find hip magazines for sale or in downloadable format, and Sonic.Net is unsurprisingly bidding for Douglas Cooper's new oral novel and has even broader ambitions. "We'd like to sell skateboards and lifestyle accessories and other things. We've talked to a couple of people, we're a few blocks from the East Village, and there's some cities in the country where you can't get this stuff. You can only get it mail order. Why not get it online instead of mail order?"

These guys are pretty darn bullish on advertising as well. "People online don't hate advertising online. What they do hate is getting advertising being uploaded while they're trying to get their e-mail. But if you're reading a magazine...You buy a magazine not just to read the editorial but to look at the ads. That's part of what you're delivering to an audience.

"Magazines on Sonic.Net that are delivering electronic forums, we're encouraging them to get their advertisers on there because the consumers and the kids want it. Because they want to know were to get Airwalk sneakers."

Come on! It's bad enough kids getting murdered for their Nikes. If you need your deck to stay street smart, things are going to get *real* ugly. And in the meantime, just say no to passive consumption. Make neat stuff—and post it. M2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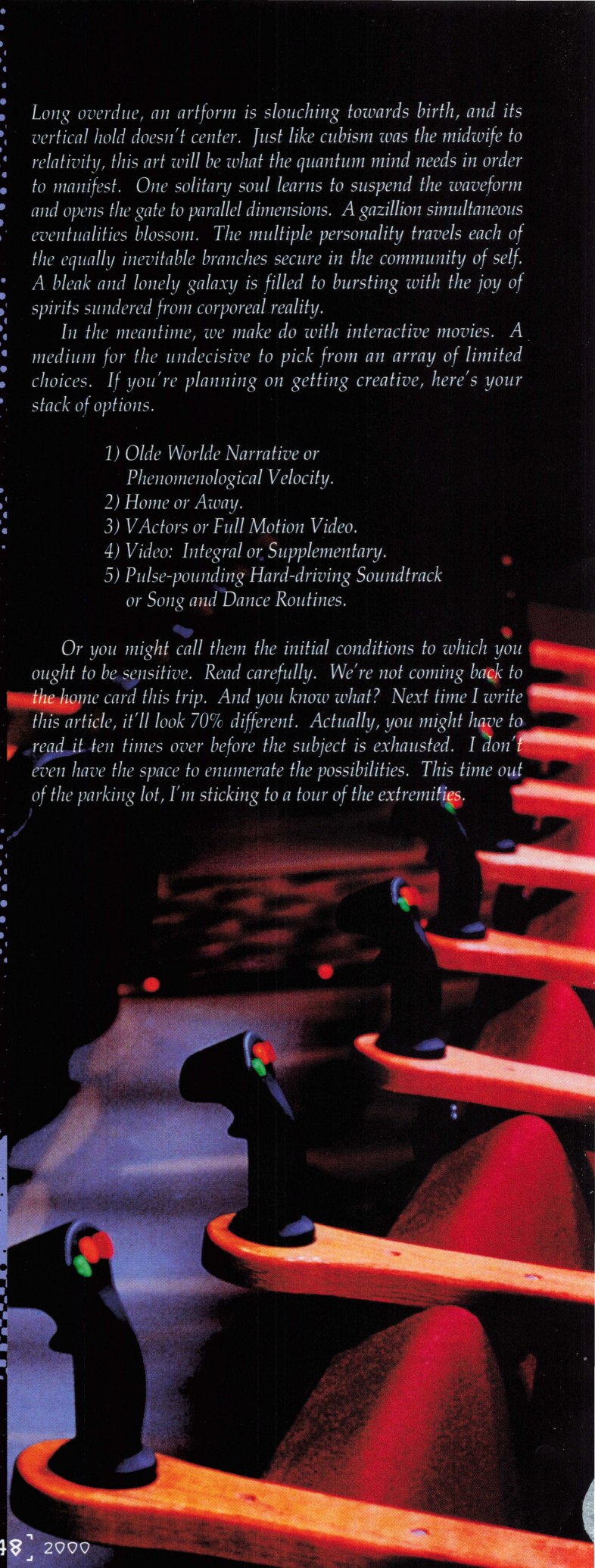
CINEMA REVUELTOS

Long overdue, an artform is slouching towards birth, and its vertical hold doesn't center. Just like cubism was the midwife to relativity, this art will be what the quantum mind needs in order to manifest. One solitary soul learns to suspend the waveform and opens the gate to parallel dimensions. A gazillion simultaneous eventualities blossom. The multiple personality travels each of the equally inevitable branches secure in the community of self. A bleak and lonely galaxy is filled to bursting with the joy of spirits sundered from corporeal reality.

In the meantime, we make do with interactive movies. A medium for the undecisive to pick from an array of limited choices. If you're planning on getting creative, here's your stack of options.

1) Olde Worlde Narrative or Phenomenological Velocity.
2) Home or Away.
3) VActors or Full Motion Video.
4) Video: Integral or Supplementary.
5) Pulse-pounding Hard-driving Soundtrack or Song and Dance Routines.

Or you might call them the initial conditions to which you ought to be sensitive. Read carefully. We're not coming back to the home card this trip. And you know what? Next time I write this article, it'll look 70% different. Actually, you might have to read it ten times over before the subject is exhausted. I don't even have the space to enumerate the possibilities. This time out of the parking lot, I'm sticking to a tour of the extremities.



by Paul McEnery

Digital Vaudevillain

For those of you who only go to the movies to grope each others bits, here's the interactive option for *you*—Interfilm, where rows of giant black knobs adorn the seats of not just the back row but every row. Leap from seat to seat in a frenzy of fondling and change the course of the plot. Er, perhaps I should explain this in more sober terms.

What you've got is twenty minutes of playing time and the guiding paradigm is democratic centralism. As a collective, the audience guides a multi-track movie with coexistent points of view that you can switch between, and you larval KGB-types can access hidden messages and inner thoughts on demand.

Oh yes, and the new feature is so Gen-Fucking-X, it stars Adam West and it's about BIKE MESSENGERS!!!!! Here's Interfilm's head honcho Bob Bejan to tell you how it works.

"In *Ride of Your Life*, there are times when there are three choices, and then it goes into a place where it's kind of almost a roulette wheel where it could be one of 22 things that could be chosen. The idea being that in any interactive story, at least at this point in time, there are always trunks. So we're doing literally multiple streaming of video, realtime, activated by the audience in real time. We do a lot of trap-door choices where you choose one thing which opens up three more in a sequence of ten seconds where you may have to make eight choices in a row. Another example is we created these things called Inops where you can kind of dive like a multiplane camera, deeper and deeper in the frame into the minds of the leading characters to get inside their heads."

Ex-CEO of Virtual Worlds (and one-time Broadway hoofer), Bejan's certainly got the hucksterism it takes to get this show on the road—and he's got a very disturbing vision of the medium. "You have to think of your audience as your very enthusiastic editorial staff. So enthusiasic that they're paying to work for you." Nightmare! Worse still, he seems to regard the medium as genetic entertrainment.

"These kids have been trained by the Segas and Nintendos of the world, even though they can't always verbalize their understanding. You put a pistol grip in the hand of anybody under 25 in America, they don't really have a problem grasping what that is. It's an unconscious connection. It's almost evolutionary. And once you put a pistol grip in somebody's hand, there's always this question in the back of their mind of, 'Am I doing well? Am I better than the next guy?' So you're creating neuroses in the minds of young Americans. [*laughs*] Why not? A little civic disorder is a good thing."

And you thought *Mortal Kombat* was bad for the kids.

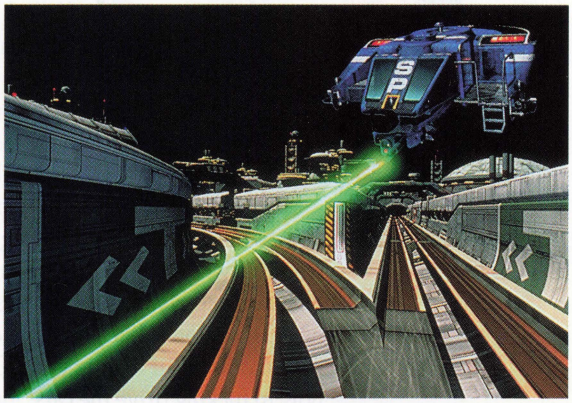
Interfilm have 54 theaters retrofitted with their equipment, with multi-picture deals with Sony and fervent hopes that the medium will catch on enough so they can supply movies to other theaters. *Ride of your Life* was due to premiere at the Kabuki in San Francisco by November.

◀ INTERFILM'S JOYSTICK SEATS

Return of the Magnificent Seven

By now, you've probably heard rumors about **Rocket Science**, the Emerson, Lake and Palmer of the gaming world. No less an authority than Myron Krueger has criticised them for being top heavy on the talent. But you *have* to be a real hardass to bitch about **Loadstar**, because the quality of the work is flashy as hell.

Long ago, in a galaxy far far away, the hottest properties in or out of Hollywood were **Star Wars** and **Smokey and the Bandit**. Put the two in a blendomatic for a surefire hit! Well, that's what **Ron Cobb** (conceptual design on **Alien** and **The Abyss**) thought, anyway.



ROCKET SCIENCE'S LOADSTAR

This pitch lay in his drawer for sixteen years until **Peter Barrett** (ex-**SuperMac** and developer of **VideoSpigot** and **CinePak**) and **Steve Blank** (ex-**SuperMac** and co-founder of **MIPS Computers**) needed a hook to hang a game on.

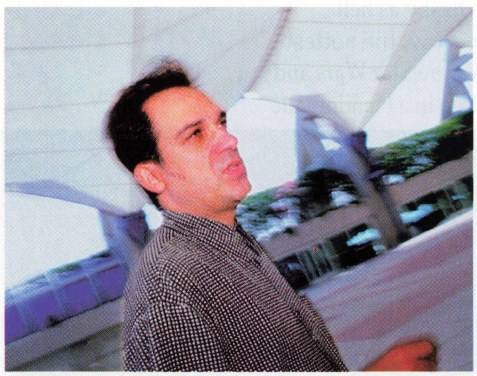
The scenario is simple. Pig Bodine's long lost descendent Tully is holed up on the dark side of the Moon and has two hours to pick up his shipment of illegal camels and get clear of the planet before the sheriff busts his ass—or blows it to kingdom come by preference. The vehicle is confined to a trackway, and your view is pretty much like standing at the front of the metro and wondering what all the curious signs are supposed to mean. The twist is that you don't have the usual radar screen to help you, you have to orient yourself by the little you can see of landmarks out in the city—not unlike trying to find your way into LA on the freeway without a map at rush hour and suddenly finding yourself in South Central.

And that's about it. Racing along the tracks proves my point that video games are rituals designed to sublimate the brute fact of mortality. Bustling through tunnel after tunnel recapitulates the death/birth trauma three times a minute. Now *that's* some swift karma. Designer **Brian Moriarty** (ex-**LucasArts**) swears this is just a trick of convenience. Exactly.

The game is hypnotically entertaining, but that's not important right now. What excites me is the theoretical work behind the scenes. The engineering team comes from a DTV background and is applying exactly those principles to entering the gray area between games and movies (or, in the upcoming *Dark Ride*, abandoning traditional game narrative for an incredibly fast virtual rollercoaster).

The second vital point is the insistence upon creative freedom. Rather than hamper themselves with Sega's

hardware limitations, the design team pull together the sharpest graphics and animation currently available. Just as soon as the hardware catches up, you'll be able to see it the way it was made. The other advantage of separating the lobes is cross platform product. Although *Loadstar* will be first available on Sega CD, it's ready for upgrade to the Saturn, and transports to other platforms—3DO and PC to name but two.



PEPE MORENO

VACTOR FACTOR

Digital Fusion is the new company formed by **Pepe Moreno** with the wad he earned off *Hellcab* which he made with "the least powerful tools at the time"—Swivel 3D, Macromind Director and Photoshop. Now he's trading up to LU Systems and SGIs for the new projects. *Rivers of Dawn*, a medieval role-playing game, and something tentatively titled *911, 2015*—the missing link between Shannon and Shatner?—with design from **Syd Mead**.

"The game is like someone dials 911, you have to respond to it but it's the year 2015 so you don't know how to fucking drive the cars! But when you're dealing with someone like Syd Mead, when he designs a car, you know, he knows everything that goes with, all the physics about it."

That you already knew. But for those of you who've been cutting class, this is Pepe's bio. He got his start in grungy photorealistic comics in *Metal Hurlant*, and his Batman-goes-to-cyberspace book *Digital Justice* was the springboard into multimedia. He's also one of the world's great motormouths, so I'll pretty much let him take it from here.

"I've never been per se, a cartoonist, but I love the comic book medium because I didn't have any money and I was able to draw. In the last three or four books, I started using xerox and I was kinda like, whoops! I could just take a photograph of New York. We're working more in 3D than anything else, and I want to get rid of 2D completely 'cause it's very difficult for me to hire someone who is as good a painter as I am—say, if I paint the panels and if I develop the characters like movie characters, in essence I'm making a movie.

"Right now, in CD ROM, you have established ways of relating to the world, established interfaces—like a VCR, there's plenty of buttons. To me that doesn't come near what this medium could do. You can totally build scenarios where you don't have to press anything, you just move the mouse about the screens and have things happen without necessarily clicking.

"So it's not about one medium repurposing or reflecting another medium. It's about that medium becoming it's own thing. The movie industry today has very little to do formwise with theatrical plays—it's a totally different ballgame. The only reason we're talking and there is a business out there in CD ROMs is because off-the-shelf tools came about at the right time. QuickTime is just really breaking the doors open for everybody. But from a creative point of view, as it becomes more and more painful to make all the pieces fit—you reach a point where you say fuck it. My lucky break is I have this 20-year-old kid and to him this is like meat and potatoes—you know, code is like conversation. He doesn't drink, he doesn't like rock 'n' roll—it's pretty odd.

"So off-the-shelf tools might seem like a good choice, but you have to do a lot of code of your own to actually get some real significant kind of product—especially now, there's competition and people are spending millions of dollars on titles."

Sorry kids, you're going to have to get your hands dirty after all.

"We're doing some things that are CPU-dependent. They're saying, 'Shit, how can you do that? That has a million polygons, how can it move in real time?' Because it's not a fucking 3D model, it's just a bit map and it's a small one at that! Provided that you can make the things behave in real time and behave the way they're supposed to be, that really is all that it asks from you. So we're sort of like breaking things down everywhere possible.

"The problem is that it's an absolute world, it has a beginning, it has an end, has a million combinations in between. There's just a certain amount of CPU power you can go buy and the more powerful the computers get, instead of making the old games work better, you just get games that are more ambitious. Right now, most of the animation programs, they take over the screen for efficiency purposes. When that happens, if you had anything on the screen before, it might just disappear, so you can't really interact with the scene. So if you get the source code—the things that allow you to map things out and have animation play in the background—then you get a better experience in terms of interaction."

photo by Heide Foley

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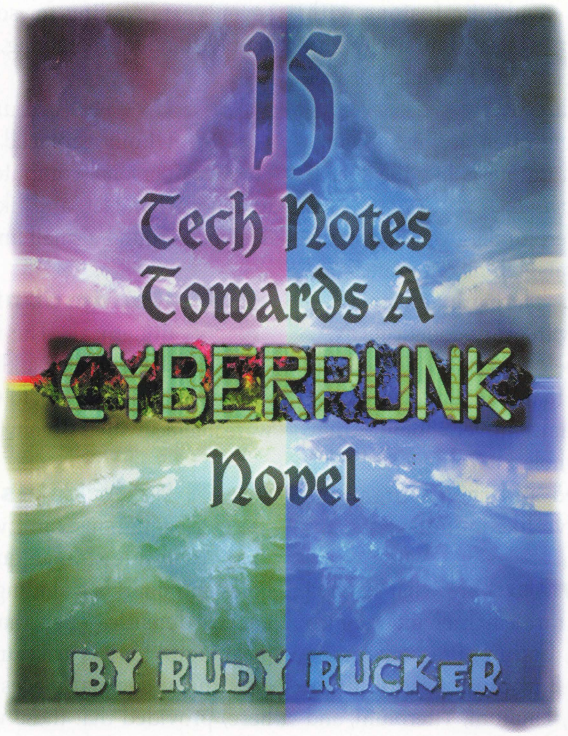
For geeks who can't stand all that messy human interaction that pads out science fiction, and as an object lesson to all you young Turks out there who think you deserve a contract with a fancy publishing house in New York, here are the working notes for Rudy Rucker's new work-in-progress, Freeware. *It's a follow-up to* Software *and* Wetware, *both of which won him Philip K. Dick awards and are now available together as* Live Robots. *Oh, and you young Turks—don't even* think *of stealing any of these ideas and using them yourselves. They're uniformly protected with UIC implants at the meme level and will be swiftly spotted by our snarling team of copyright lawyers. Enjoy! — Paul McEnery*



Herbert "Dietz" Wortman

Illustration by Georgia Rucker

1 Flickercladding is soft imipolex plastic that acts as a giant parallel processor. With its invisible cellular structure patterned in by chelated polymers, its fibers carry the messages. The first flickercladdings had actual wires in them; they used to be like coatings fused or glued onto the bodies of the robots called the boppers. But the coatings got thicker, and soon peeled off the boppers to become independent **limpware** creatures known as **moldies**.

2 Chipmold is the human-created plague which killed all of the **boppers** (who were conventional robots using existing tech: garbage cans on wheels with circuit boards and motors in them). But the soft plastic limpware flickercladding gets smarter. It likes the chipmold, it is veined by chipmold like a ripe bleu cheese. Jellyfish limpware eaten through with blue veins of chipmold.

3 Femtotechnology is the next big thing beneath nanotechnology. Femtotechnology means technology at the size scale of one quadrillionth of a meter, or at 10^{-15} meters. Femto- comes from Danish for fifteen. ("I never met a Dane who wasn't bone-dull." —W.S. Burroughs.) An atomic nucleus has a diameter of 2×10^{-14} meters, which can be expressed as twenty femtometers. Femtotechnology could be in charge of direct transmutation of elements as well as, I would suppose, the conversion between mass and energy. I think quantum mechanics would start to play a role at this size scale.

Femtotechnology is the same as what Heinlein called **direct matter control**.

4 Perpendicular time, with its other order of reality—the sensation that there are other creatures around, that they are the little fast flashes that you see out of the corner of your eye sometimes.

5 Programming—the joy of controlling a machine. Soccer—the joy of controlling a rolling sphere. Could a soccer ball or a shoesole be a computer? The object is computing as an elastic mass, and is probably programmable. But how? How to program limpware? You would convince it to do something? The limpware learns by sweatlodge-type techniques?

6 Strange quarkbags are something femtotechnology might be good for making. As described in "The Search for Strange Matter," in the January 1994 *Scientific American*, most matter is made of protons and neutrons, and these particles can in turn be thought of as little bags filled with quarks. There are—at least—three kinds of quark: up, down, and strange. A proton is a bag holding two up quarks and one down quark, while a neutron is

Computer image in arch window by Steve Holtzman; other images by Rudy Rucker

a bag with two down quarks and one up quark. Ordinarily you can't have more than three quarks in a bag together. But if one of the quarks is strange, it throws off the exclusion principle—like a slight flaw in tiling a wall leads to a fault that runs through a big pattern before it can repeat. Quarkbags can have just about any mass.

So now suppose there are atoms with quarkbags at their center. And suppose there is a chemistry for these atoms. Chemistry would now be kind of chaotic, with different rules in different places.

I have an image of Toontown. Like an ashtray is zapped with strange quarks, you like spray a spraycan of strange quarks onto a boomerang-shaped white plastic ashtray and now it starts warping and flexing because it's now made of strange quarkbag matter.

The technology for effecting these changes would of course be femtotechnology. Given that a nucleus is about 20 femtometers, it seems likely that an individual quark might be about a femtometer in size.

7 **Moldies** are capable of weird symbiotic fusions with humans. A moldie might form part of itself into a U-bight, clamp onto your perhaps willing neck, sink fine microprobes into your neural masses, and control you directly.

Moldies can in fact merge together, and often do this, when at home in the comfort of their nest. They form nests like the speed-freaks described in Andy Warhol's book *Popism*.

It would be interesting if the nests were underground, like the burrows of the East African naked mole rats, who like termites and bees, have a queen and work together. They are "**eusocial**"—colonies with hundreds of individuals all with nearly identical DNA.

A **moldie bus** is like a hovercraft streetcar that is a single huge jellyfish-like robot. A giant flying jellyfish that flies at a level several inches above the street. They don't actually hover though—they kind of run like horses. But they have whole row of legs, each leg going across, the bottom is corrugated and the corrugations swing forwards and backwards in a wave-like motion.

8 **Chelated rare-earth polymers** are what Andrea the moldie uses to get high. The rare-earth elements, also called lanthanides, are Lanthanum, Cerium, Praseodymium, Neodymium, Promethium, Samarium, Europium, Gadolinium, Terbium, Dysprosium, Holmium, Erbium, Thulium, Ytterbium, and Lutetium. Ytterbium was first found in a mineral called yttria in the 1878's. The mineral yttria was named for Ytterby, Sweden in 1794.

9 **Flying wings** of moldie imipolex. Manta rays of flicker-cladding flying around in the thin upper atmosphere like supersonic airplanes, drenched in solar radiation. Thanks to the algae in their tissues, they eat light.

Oil is used for plastics such as flickercladding that makes up the moldies' bodies. The moldies would like to absolutely forbid that oil be made into gasoline and burned. The stuff is too valuable as plastic. For a moldie, burning oil is considered on a par with using human blood to make blood-sausage.

10 **E-mail** in today's ever-more-rude America means a person can just come up and start talking to you, as if this was like some endless global party. The endless inter-planetary party that everyone is involved with. It should be pleasant and life-enhancing, like you can always plug in with other stoned freaks like yourself in the country, they can see the crazy shit you are doing, like an endless easy guilt-free phone call.

11 **ASICs** or Application Specific Integrated Circuits comprise 95% of computer chips made today. Suppose that in *Freeware* the ASICs have all been replaced by limpware. This is reasonable. For the people in 2053 to use chip-based computers would be like us now using gear-based computers. We used to have gears in a watch, and now we usually have a chip. A few watches still use gears simply out of nostalgia. But nobody would dream of starting out with a plan to use lots of little gears for the controls of a microwave oven, or of a TV, or a traffic light...

In the same way, in the 2053 of *Freeware*, nobody would dream of using a silicon chip for an app. In other words, a microwave oven, or an uvvy, or a car, or a clock—all of these have control circuits that are little smidgens of limpware. They are not all that smart. They are dim. They are so dim they will do something like sit in a toaster for seven years waiting for someone to push the toast button. DIM should stand for something, like ASIC: **Designer IMipolex**.

12 **Uvvies** are universal viewers, devices which have wholly replaced the television, the telephone, and the personal computer. An uvvy is about the size of an old telephone handset, and like most of 2053s intelligent devices it is designed around a small limpware processing unit: a **DIM**.

13 **Headmounted displays** are confining and unnatural. The way to get full virtual reality immersion without such a kludge is to place **limpware scarves** on the neural ganglia. So as not to violate the sanctity of the skin, let the limpware interact with the brain tissues via tight electromagnetic fields.

14 **Wormholes** might be places where the scientific equations can't work, or maybe even inside the sun, or inside strange quarkbag matter. There might be wormholes and quarkbags hiding inside the sun. In wormholes there are energy densities such that, say, a thousand decimal places are meaningful for the real numbers involved—Planck's downer of like only thirty decimal places being meaningful is out of the picture here, provided that these wormholes are somehow inside Planck's constant. In here, even the simplest of physical processes' effects are using laws with nonlinear equations of, say, the fiftieth degree. And like changing the four-hundredth digit in the decimal expansion of the coefficient of the thirty-eighth-power term will throw your process into a wholly different basin of attraction leading to a wholly different strange attractor. And the guys are trying to hack this rule, and they can't, so they use genetic algorithms to search the huge parameter space, and then...

15 **Chaos** means that you can't control, or that when you try to control, the results are not likely to be what you expected (sensitive dependence on initial conditions). As a cultural paradigm, it could mean accepting that the half-assed parallel-computed way in which social decisions arise is much more robust and adaptive than any kind of dictatorial scheme could ever be. M2

Rudy Rucker can be rudely interrupted at rucker@jupiter.sjsu.edu.

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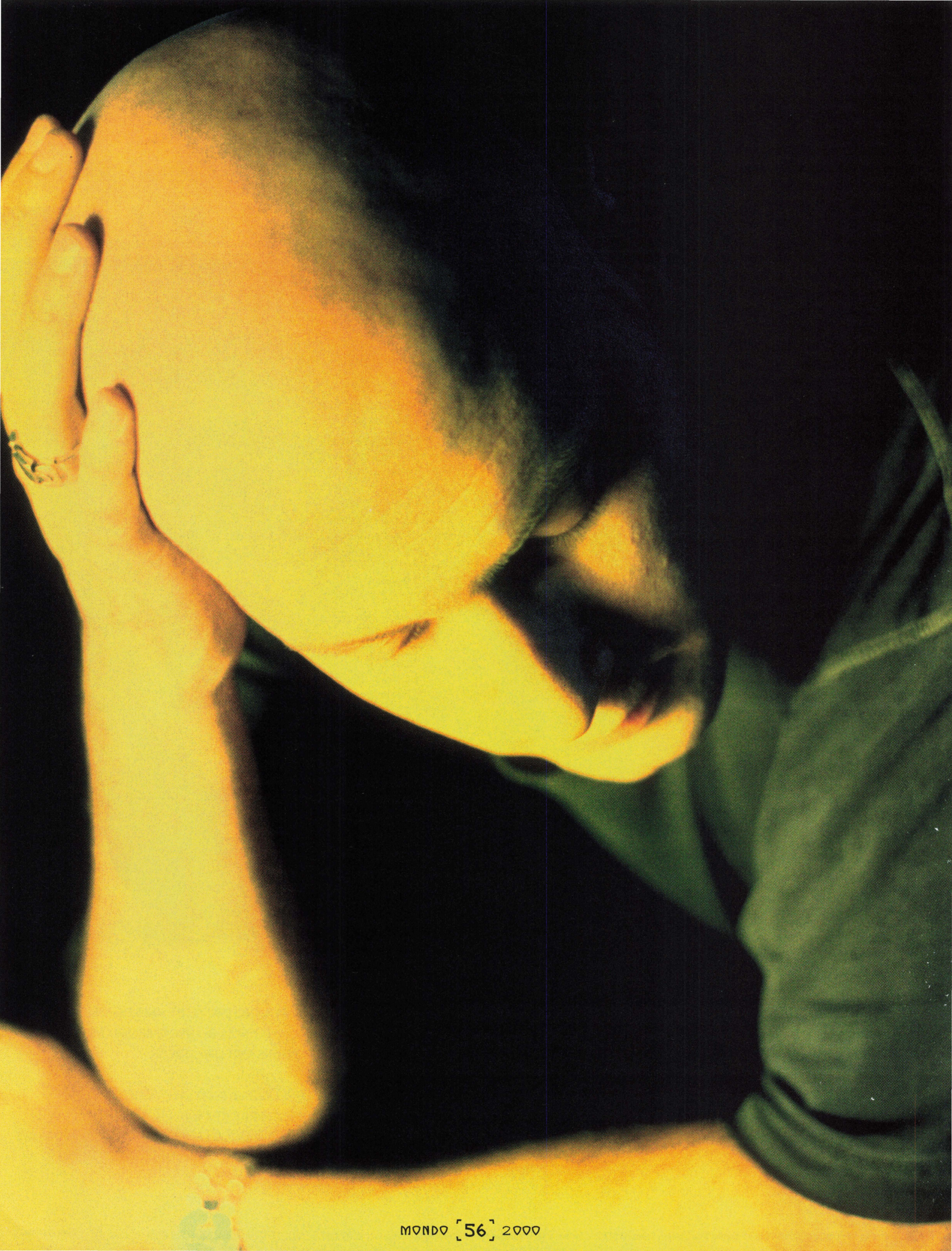


the insufferable darkness of remembering

Douglas Cooper rants to David Kushner

The first time I met Douglas Cooper, he was eating my potpourri. It was a weird sight, even for a New York party: some affable bald Canadian guy making an hors d'oeuvre of my mother's housewarming gift. When I explained that the dried chemically-coated orange slices could be toxic, he shrugged and kept nibbling. Whatever possesses a man to ingest poison might just inspire him to write a book as disturbing as Amnesia. *Cooper's first novel is violent jazz, a frightening exploration of memory and evil. It's the story of Katie and Izzie, young Torontonians whose lives mingle in blood and shadows. As Izzie tells their tale to a librarian who's four hours from being married, we descend into Katie's ravine where she may have been raped by Izzie himself. "It was," Cooper writes, "part of a network of wild spaces that laced the body of the city like a net of veins."*

The rest of the novel employs everything from Freudianism to architectural theory as it ravels and unravels the characters' minds and memories. For Cooper, an architect turned playwright turned novelist, the medium is very much the message. Amnesia, *he says, may be his last safari on the merely printed page. Lately, he's been making a "book video" with Jane Siberry and preparing to orate digital lit. We spoke in his lower Manhattan apartment. It's a comfortable space with a shower in the middle of the kitchen. When he's not here arranging his furniture, he can be seen combing the streets of Soho, murmuring into his fist. He insists he's dictating his next novel into a tape recorder. I however have my doubts. Last time I saw him talking to himself, there weren't any wires.*

Photographs by Jill Greenberg

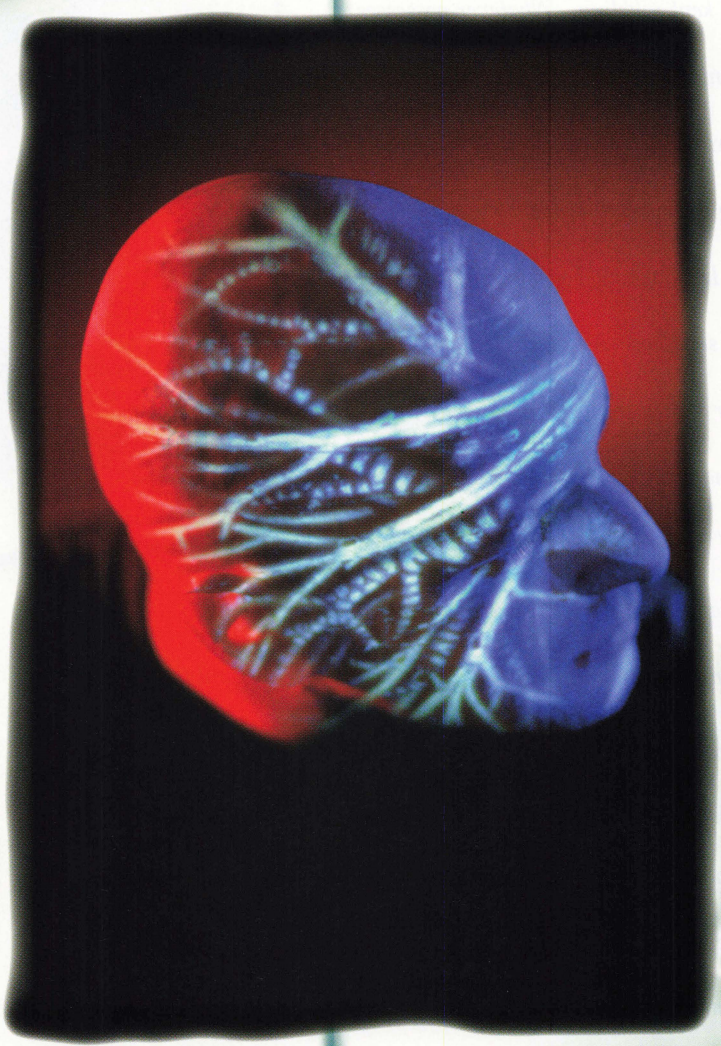
Design: Wendy Lewis

M2: I've noticed you're carrying a tape recorder around these days. What's up?
DC: I've decided to return to an oral mode of composition. *Amnesia* was partially composed through tape recorder, and I was trained as a public speaker and in drama, so for me it's not that unusual.

M2: Do you edit?
DC: Very much so. I walk around the city, I take notes on the tape recorder. I talk to myself. The Greeks divided philosophers into those who did their best thinking while sitting and those who did their best thinking while walking. It's a peripatetic novel. The new novel is called *Delirium*, and the narrator is going to be walking the city picking up pieces of the story as he speaks. It picks up from the end of *Amnesia* actually.

M2: *Amnesia II*, the sequel?
DC: It's hard to call anything a sequel. I conceive of this as one project. Ideally, I'd like all my prose works to be connected in that way. The dead brother is the narrator now.

M2: What's the impulse that makes you want to re-invent the novel?
DC: I'm pulled in two directions. I'm in a sense terrified of technology. That's why I obsess about the Frankenstein myth. I'm constantly aware of what technology does to distance me from nature. I'm not talking about nature like a nice walk amongst the lilies, but from your own nature. On the other hand, I was the first generation to become computer literate. I was programming computers when they were still on punch cards. I can't write longhand. Even a notebook computer is still cumbersome.



M2: It's not fast enough?
DC: It's almost fast enough. I can type almost as quickly as I can think. But I can speak even more quickly than I can think. It's more akin to jazz than, say, classical composition. There's a way in which you improvise when you're speaking that's a little bit more Zen. [*laughs*] It has to be immediate, there's no little synaptic blip between thought and word.

M2: Tell me more about *Delirium*.
DC: What I'm doing now is creating a novel which will exist on a computer bulletin board. It's already been picked up by the William Morris agency and they're going to try to sell it to some of the major online services—AOL or CompuServe or whatever. First of all, the point of the Internet is not to offer anybody exclusive rights to anything. You may as well get it on as many services as possible. But Sonic.Net is definitely extremely interested.

M2: So how *can* authors get paid if they work in this kind of arena?
DC: We haven't really worked that out yet. Sonic.Net spoke of having authors paid for every time someone downloads one of their texts. That might work.

The entire structure could exist for a time in cyberspace and then exist on CD-ROM—I may have to rewrite and take some of the rough edges out—and then be redesigned and published as a highly designed book with real pages and covers and stuff.

M2: Would you care if it never came out as a "real" book?
DC: I'd be sued.

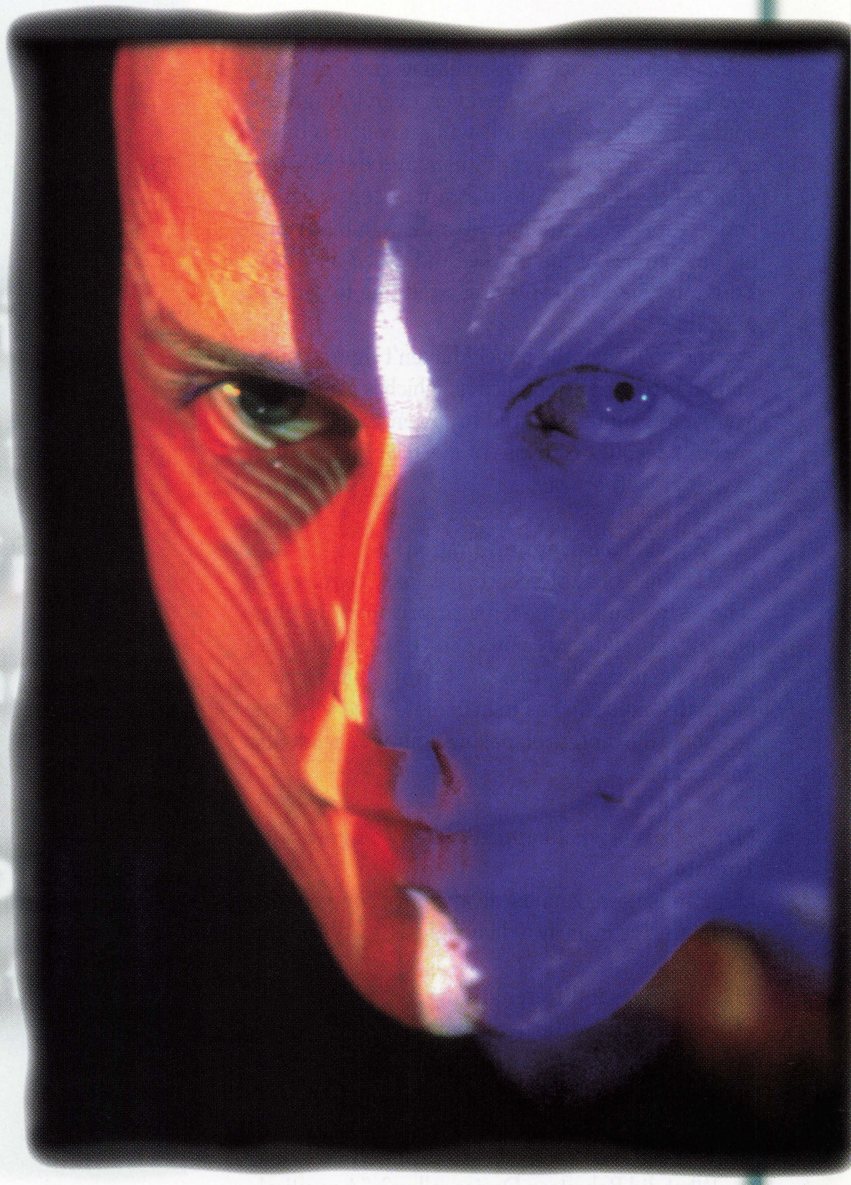
M2: Well, what if you could get away with it?
DC: I am essentially a novelist. When I cease to be a novelist, it will only be to become something entirely analogous, such as a playwright. *Amnesia* was a novel that tried to become a play. It investigated various other media, which is not a new idea. I mean, Joyce did it. Ultimately, this is simply seen as a rigorous experiment in order to produce a new kind of novel. If I say something about it, I'm defeating the purpose of the process. I really don't know what that novel's going to look like, but it's very important that it ultimately be a novel. I don't see myself as a software designer. That's not a direction I'm taking in life. I'm taking a new kind of architecture which is called cyberspace to produce a new kind of textual structure.

M2: So what's the format?
DC: It exists as a kind of architectural structure in cyberspace. It's going to look like a labyrinth stretched between two prisons.

You enter from a prison. You find your way through this difficult labyrinth and come out in a prison. So it's partly an ironic structure. [*laughs*] I now live in a country that defines itself, radically, in terms of freedom, and yet locks up more civilians per capita than any nation on the planet. And thanks to Foucault, the panopticon has become a symbol of modern surveillance-oriented authoritarianism. It's a nice metaphor. Says a fair bit about central planning, as well, and the architectural obsession with the master plan. The idea that one little man can restructure the city.

M2: Okay, so how do *you* put all this together?
DC: I've been working with the idea of an architectural novel for some time, but this will be pushing *Delirium* literally into three dimensions. I haven't figured out the precise mathematics of it, but there's going to be a schema that I will then fill with sonic text—because there will be no text, interestingly enough. There will be digitized sound clips of me reading passages, more like oral poetry than written text.. The schema will pre-exist. A site like a hyperchess board, you know, with those three layers? I imagine there will be six layers with eleven cells per layer and then twelve other cells that I can rearrange in various ways to produce the prisons on either end.

What's interesting in hypertext is to produce connections between cells that are not simply architectonic, that aren't simply pathways like adventure games were. *Go left. Ugh! You're in the mouth of an Orc. Go right, you are battered over the head by a witch.* Instead, have connections that are metaphorical. We're working in novel space here. I really want to remove myself from the Dungeons and Dragons mode, which is just a bad homoerotic sophomoric fantasy. I'm creating an interesting deep structure and a way of programming randomness into a text. It'd be like throwing a novel the way you'd throw the *I Ching*.



M2: How will this differ from existing hypertext where you can navigate based on individual words in the text?
DC: What I'm talking about is an extension of that concept. You know, it's old technology. It probably dates back to *Hopscotch*, which was a novel written in proto-hypertext, or some of the Borges short stories. I've been trying for three years to write a book like a labyrinth. Here, the technology already exists that just happens to have that shape. So, I'm going to try and create a very explicit labyrinth that has certain coded cells and connections. Basically, what I'm trying to do is to look at hypertext architecturally, which to my mind is a labyrinth, and expand upon that to produce a dense and interesting literary text. Again, it's a subversive process. It's an attempt to take a medium which thus far has given rise mostly to sub-Tolkein fantasy knockoffs and inject some serious literary content into cyberspace.

M2: How *did* studying architecture influence your writing?
DC: Something I learned in architecture school was that to put together a rigorous and interesting project, you devise a series of simple but peculiar rules. Then you adhere to them rigorously. [*laughs*] But the reason I wrote a novel was because I was changing media. I went to a school that was supposed to be the best in the world and I just thought it was very expensive and pretentious. There were just too many dim rich kids wandering around posing in expensive suits. And I hated London. I didn't see the sun for about six months. I got really depressed and dropped out, essentially. First I wrote a screenplay, then a novel. It was just a way of keeping myself alive. *Amnesia* was full of odd techniques. It had its own peculiar, mostly filmic and architectural, logic.

M2: There's that thematic line, "the mind is like the city." How did that idea germinate?
DC: It's a very old metaphor. I didn't come up with it. The metaphor at the heart of Plato's *Republic* is "the soul of the well-ordered man is like the structure of the well-ordered city." That way of thinking runs all the way from Plato to Freud. All memory theory is based on the notion. The mind is shaped like a mansion full of rooms.

Everything in this novel that's stated as a theme tends to ultimately become an organizational rule as well. There's no

point in starting to tell you something 'cause otherwise you just get preachy. However, even though this could never be called a left-wing novel, it *is* bitterly critical of unthinking capitalism and development gone wild. There's a deep strain of conservatism and a responsible strain of liberalism in the critique of the excesses of the market and greed as a vice. You don't have to be waving a red flag to come up with that.

The politics of the novel I haven't figured out. I think they're deeply conflictive, which is a good thing. My friends on the left and my friends on the right are both deeply suspicious of me. [*laughs*] I wouldn't have it any other way.

M2: So what *was* your inspiration?
DC: The hell of adolescence! [*laughs*] The misery of acne. After pulling the ten year prison camp phase of your life, suddenly you're in your twenties and there's the possibility of being happy. It just struck me that somebody has to articulate precisely how gruesome the process of making your way across that minefield is.

M2: So this is what happens when you grow up in Toronto?
DC: Part of it was running away from a bourgeois Jewish upbringing in an incredibly tight-assed WASP city.

M2: How was it different living in Canada?
DC: Canadians are different. But we're subtly different. We're very much like the Martians in those early sci-fi films. [*laughs*] We look a lot like humans and are capable of insinuating ourselves between the secretary and the teller—but in fact we're here to steal Earth women.

What did Robertson Davies call us? "A mystical northern race dressed as Scottish bankers." And it's true, there's a deep peculiar strain of mysticism in Canada that doesn't look anything like New Age. It's not the bullshit Californian *I'm OK, You're OK* mysticism.

I'm as rational as anybody. I have two degrees in philosophy and I know the scientific tradition, but I don't immediately discount that part of my psyche. I've felt presences. I've certainly had contact with *living* people in ways that cannot be explained. I guess I do believe to an extent in telepathy. It *can* all be explained by coincidences. On the other hand, I am very suspicious of the limits of reason. I don't think it's because I'm dim or unlearned. I just think there are mysteries.

M2: Was there a specific character you worked all this out through?
DC: Most people in the book undergo similar traumas. There's a kind of echoing and duplication in the book. For instance, there are a number of amnesiacs in the novel, a number of people going through severe psychological growing pains, put it that way. The voices all tend to mix together and pull apart. Kate and Izzy both wind up fundamentally crippled by the adolescent search for love, by their first encounter with the full depth and cruelty of sexuality. It's not all Valentine cards.

M2: Is that why *Amnesia*? Forgetting is surviving?
DC: Well, there are no morals in this story, but in order to love people as human beings, you actually have to forget the cruel substratum that underlies the concept of love. Certainly you have to forget the whole dance of stumbling error that leads to becoming graceful in that world. For the most part it's a damaging experience and you have to put all that humiliation behind you.

M2: There's a tremendous presence of evil in the book, too.
DC: Oh yeah. It's a dark book. One of the guys I read a fair bit is Georges Bataille, the French philosopher/theologian/pornographer. He deals with the problem of evil by embracing evil. What he decides is if you're going to have a vision of the good, it's going to be in the face of horror.

It's a peculiarly theological book in some ways. Some of the rhetoric is ripped off from *Isaiah*. It's not plagiarized, but it leans very heavily on some of the patterns of the old Isaiah where he predicts the destruction of the city.

M2: Then there's your interest in the Frankenstein myth.
DC: Well, Mary Shelley's *Frankenstein* is a parable about the overly optimistic romantic embrace of technology. All we had to do was cure our technological ills and you would cure all of our moral and educational ills, etc. It became kitsch when it descended to the level of Hollywood. But even the Hollywood *Frankenstein* is profound. You know, Boris Karloff! It's an interesting piece of theater.

M2: You've recently completed a book video using a full film crew, booms, cranes, and the AVID editing system. How'd it go?
DC: We crashed the system dozens upon dozens of times. We called AVID. They kept giving us information on how to remount the system. They have a 24-hour hotline. Finally we asked, why is this happening? We're editing a 3 ½ minute video and it keeps crashing. It turns out we were putting more special effects into three and a half minutes than anybody had ever tried before. We pushed the system to its absolute limit. It makes for a very densely layered video, but the system didn't know how to handle it. We finally pulled through, but it was treacherous.

M2: Did you have any prior experience in video?
DC: Showtime used my head in an advertisement. They projected images on it. Why I submit myself to this form of humiliation I don't know. I was very broke at the time. They'd project the word "Romance" on the wall and a flower on my head. Then they'd project the word "drama" on the wall and the happy face. Actually it was coextensive with my head so it fit like a mask. By all accounts it was a tremendous success. And in fact they never did pay me—it's a horrible life.

M2: Did the technology get in the way of the process?
DC: I learned from years in the theater that the way you don't let technology get in the way is you delegate like crazy. The person who by rights is supposed to be frustrated by the technology is the director, who was Susan Kaplan. Whenever you need something to be done, you find the guy who knows how to do it. That's what we did. We had a very good cameraman, we had an editor who knew the AVID system inside out. Susan would just say, "we need running water here," and they'd call the plumber. [*laughs*]

This is the way frankly all artists should work with technology. I don't think you have to immerse yourself really. That's what the engineers do. I learned this in architecture school. Engineers figure out what makes the building stand up. *You* decide what's going to make the building interesting.

I think it's the same with screen writing. I don't know how cameras work. I don't *want* to know how cameras work. I find it just gets in the way of screenwriting. There are people who disagree with this way of operating. But I've always found that if you get too immersed in technology, you just produce techno-nerd, sophomoric bullshit. It's your job to make sure that your technonerds *don't* produce that bullshit. You know what I mean? [*laughs*]

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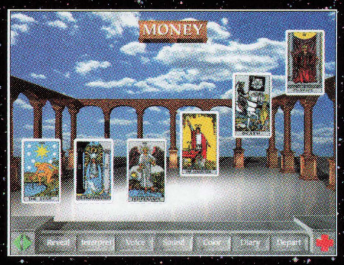

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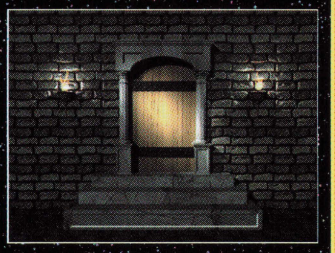

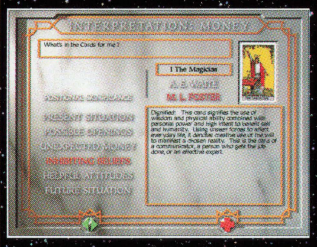

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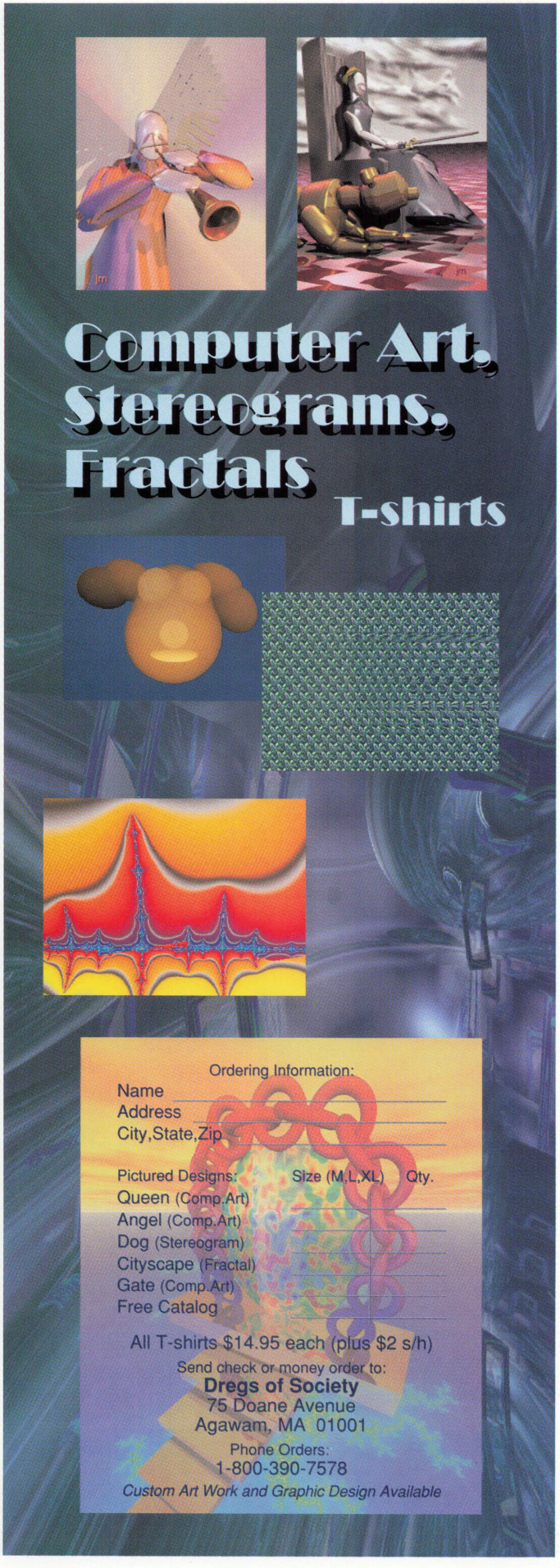

M2: What's the role of a book video? Do you want it to end up on MTV?

DC: I wouldn't want to say *where* specifically I'd like to see it, because I'm not responsible for distribution. Anywhere that they show three and a half minute video clips, we would like to see this video show. It's very important to subvert the rock video market, to insert more serious art forms between heavy metal songs.

Part of all this is to take what is essentially a hollow medium —and what's hollow about it is the software, there's nothing about pixels that are necessarily drab and mindless—and subvert the software. Put things on this medium that make the medium work well. The medium at the moment is crap. It will remain crap as long as people don't feel they have to think when they produce.

M2: Is the video getting uploaded as well?

DC: Interesting thought. That's connected more to *Amnesia*, of course, and yes, people are thinking as well about the CD ROM version of *Amnesia*, etc, etc. And actually, I want to tell you about two other things. Just by chance, I delivered a paper on the architectural novel at the Anyplace Conference in Montreal, which is one of the world's important architectural conferences. After my paper, there was just this stunned silence afterwards, so I thought, well, that was either a tremendous failure or a stunning success. Anyway, about a week later, Peter Eisenman phones—he's kind of a doyen of American architects—and said how would you like to be my storyteller at the Milan Triennale? And then Diller and Scofidio called me and they said, look we've been commissioned by the Pompidou Center to do a piece of virtual reality and the Banff Center's supplying all the technology, including an Onyx. So I'm writing this interactive VR script.

Suddenly I'm working with three of the world's great architects. I mean, I couldn't have asked my career to go in a more ironically appropriate direction. I'm now tapped into this international network of architectural cybertheorists, a relatively small but fascinating Internet cabal.

M2: What are they up to?

DC: Well, how our universe is going to look in the next 200 years may very well depend on the decisions these people make.

M2: A conspiracy of Le Corbusier-style social engineers?

DC: All of these guys are more sensitive than that. He was a genius but he was a master planner in the early modernist mold and most of these people are a little suspicious of that way of operating. What they're really trying to prevent is a new form of barbarism erupting in cyberspace.

M2: They'd be our natural enemy then.

DC: Not necessarily, because very few of these people are vulgar capitalists. They're also not flag-waving leftists, but they don't buy into the shopping mall mentality. Which is what cyberspace looks like at the moment—a combination of bordello and shopping mall. And that's a problem.

M2

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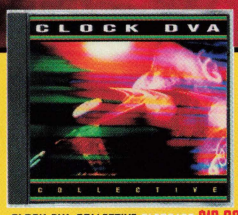

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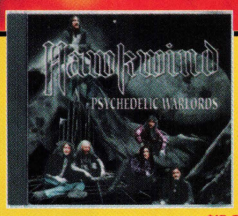

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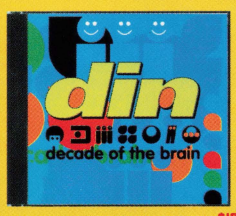

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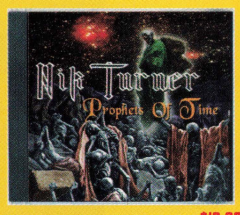

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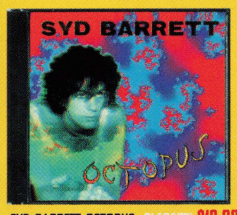

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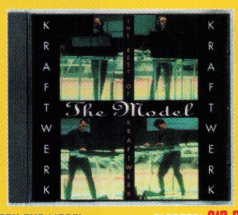

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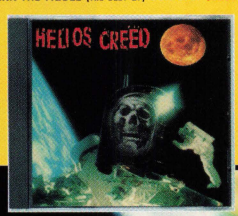

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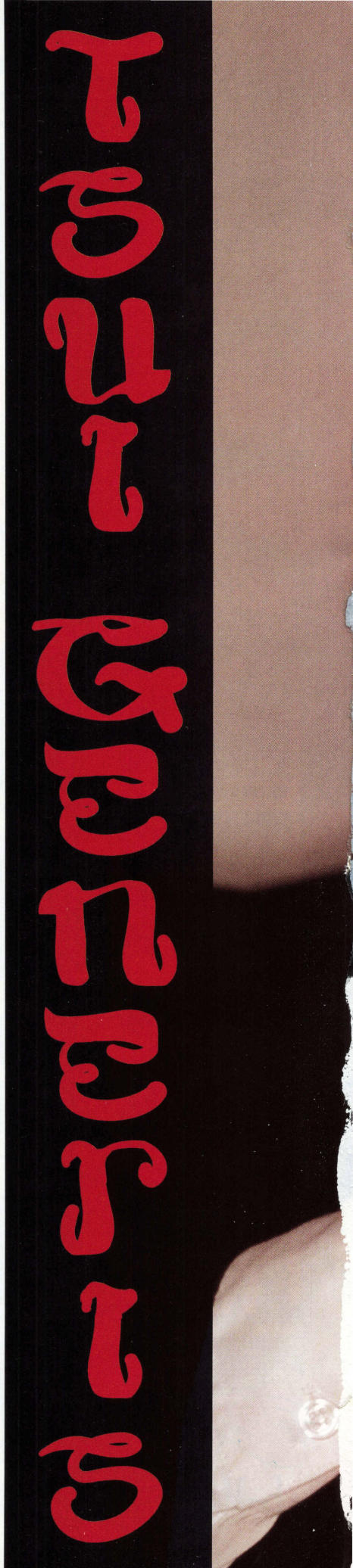
Eugene Tsui

has at least one thing in common with Samuel Jackson. They both learned a lot from Caine. In fact, Tsui got his black belt in preying mantis style kung fu when he graduated from high school. And that's not the end of his physical abilities. Ask him nicely and he'll show you his turn as a flamenco dancer. He's also a flamenco guitarist, but he doesn't do them both at once.

BY HEIDE FOLEY • PHOTOGRAPH BY BART NAGEL



"The tree is my master." Antonio Gaudi

In a previous life—the 70's—he played piano for the Linda Sky Dance Company who operated halfway between Merce Cunningham and the Harlem Dance.

It's this conception of physical perfection as spiritual grace that drives him as an architect. And it's his vision of holistic structure that leads him to bring the likes of the Kronos Quartet to play in his warehouse space. His interns have to learn form and structure from the music. Tabla maestro Zakir Hussein's senior student plays there also. The same play between deep structure and improvisation that you find in the Indian classics is there in Eugene's architecture. Sometimes to the dismay of his clients who find him every day on site making adjustments as he goes.

Honored for his designs since age sixteen, Dr. Tsui holds four professional degrees in architecture and city and regional planning with a "write your own" doctorate in education and architecture from UC Berkeley. A member of the design team for the 1976 Montreal Summer Olympics, Dr. Tsui is the president of Tsui Design & Research, a San Francisco Bay Area architecture, industrial design and city and regional planning firm—a firm that recently put together an $80 million building for Apple.

Eugene Tsui is the evolutionary architect, using electron microscopes to examine plant cells, fibers, seashell structures, insect structures, all kinds of materials to try to understand the secret of how nature creates the way it does, and apply that intelligence to human building. He synthesizes the curves and dynamics of the natural world with the latest discoveries in materials research. Fantastic homes, towers, theme-parks and "floating cities" which are economically viable, environmentally sound, and morphologically correct.

His philosophy of design dismisses the "straight-line, flat-plane, cut-and-butt mentality" of traditional forms in favor of a structure that responds to the organic circulating flow of human beings. Elemental factors of climate supply the basis for self-sufficient power; synthetic—yet non toxic—materials integrate seamlessly with environment & ecology. A premium is placed on the changes of individual and communal needs, and the amount of labor necessary to build is kept at a minimum.

Tsui doesn't formally use Feng Shui, he builds from his own natural science but he consults with Professor Lin, the international expert who rarely makes more than a couple of small suggestions. Feng Shui is vindicated. And Feng Shui, otherwise known as the Art of Wind and Water, does have deep resonance in his work. One new project, known as the Airplane House is a conical structure with wing-like cantilevers heading South and West. The curvature will not only diffuse quake energy but also uses the Venturi effect against the possibility of fire.

Another project is The New Watsu School of Massage in Middletown, CA for the devisor of Watsu, Harold Dull. Watsu is a form of water shiatsu which is spreading like wildfire, and the building features five spherical two-floor domes with indoor and outdoor pools for the massage. It's a hot area so the outside is shaded by a canopy of deciduous plants over the pool in the summer, providing light in winter. And on the South-facing hillside, the dome shape has max volume, min surface area so there's little heat intake.

Another advantage of the dome is you can start construction before permit, with struts. All five domes will be assembled in two weeks with concrete on the outside and spray-on recycled-paper-cellulose Thermocon for insulation—a soft, friendly material that gives to the touch. How appropriate.

There will be a book out—Evolutionary Architecture: Nature as the Basis for Design *(Wiley), and you can also find poster and postcard portfolios and his two calendars in all good bookstores. But his new work is a house for his Mom and Dad, known variously as* The Tsui House *or* Ojo del Sol. *Enter the architectural poems of Eugene Tsui, where designs are as living organisms and ceilings are windows to the stars.*

—Jas Morgan

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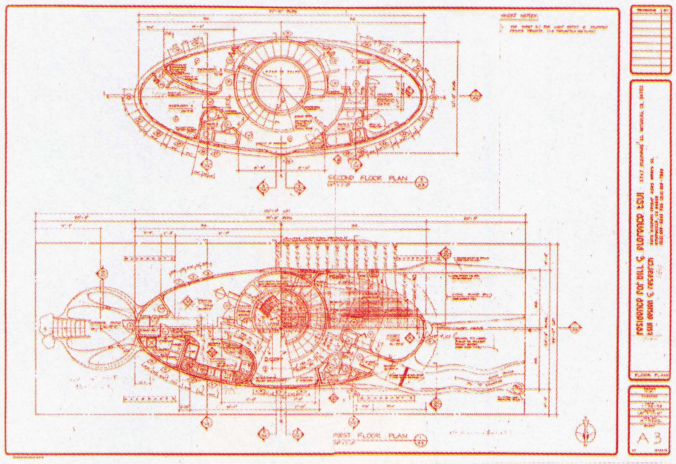
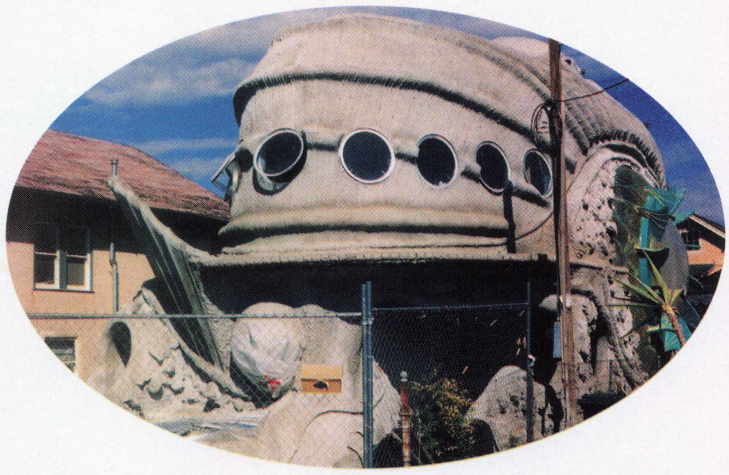


Details of the Tsui house under construction



M2: Tell me about the The Tsui House.
ET: It's an unusual house, for instance it's oval in the plan. And there are no stairs in the house—instead there's a spiral ramp in the center of it, and it has a two-fold purpose. One is to get you upstairs, and the other is to act as a kind of radiant heating coil. It's because the ramp is on the south side and there's this huge 15-foot occulus window that acts as a kind of sun-catcher to heat up the central portion of the house and through the ramp it radiates to the east and west sides of the house. The house has inclined four degree walls that keeps the center of gravity of the house low in case of earthquakes. And also the house is aerodynamic so it prevents a lot of fire buildup. We've found that the flat, square-box house actually acts as a firetrap by creating a vacuum pocket when there's fire carried by wind to the house. This prevents that from happening at all.

M2: How do you design the aerodynamics? With computers?
ET: No, we use wind tunnel tests and we just do a lot of technical examination like that.

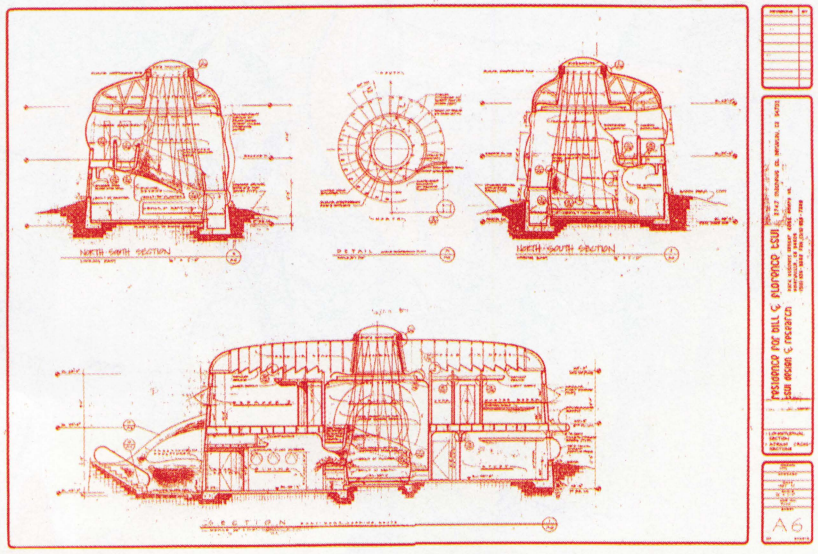
M2: What other features are there?
ET: We have black tubes hidden in the south-facing side that are filled with cold water. They heat up during the daytime and then at night when the air cools down, the south-facing side of the house warms up, so it acts as a kind of natural heating system with no mechanical parts.

M2: Sounds very efficient.
ET: It dramatically cuts your heating bill. The house also uses a recycled, styrene-carbon cement block system that's completely waterproof, termite proof, and fire resistant. And it's very easy to put together—the styrene blocks simply glue together.

M2: What's styrene, exactly?
ET: You know, the recyclable plastic used for coffee cups.

M2: Styrofoam.
ET: Styrofoam, yes. So that block system is used and the house, the edge of the house is partially underground by four feet, and that helps to insulate the house because the earth acts as a natural insulator.

And the house has three levels. You walk in at the first level and then ramp down to the living room level and again to the kitchen, dining and outdoor patio level. The reason for that is that the house is actually quite small by western standards—it's about 1900 square feet—and the level changes are to create a sense of spaciousness as you get further into the house. From the middle of the house, you have a 28-foot height, and it's completely open to the sky and to the south side by giant circular domes—they're acrylic.



Architectural schematics for the Tsui House, 1994.

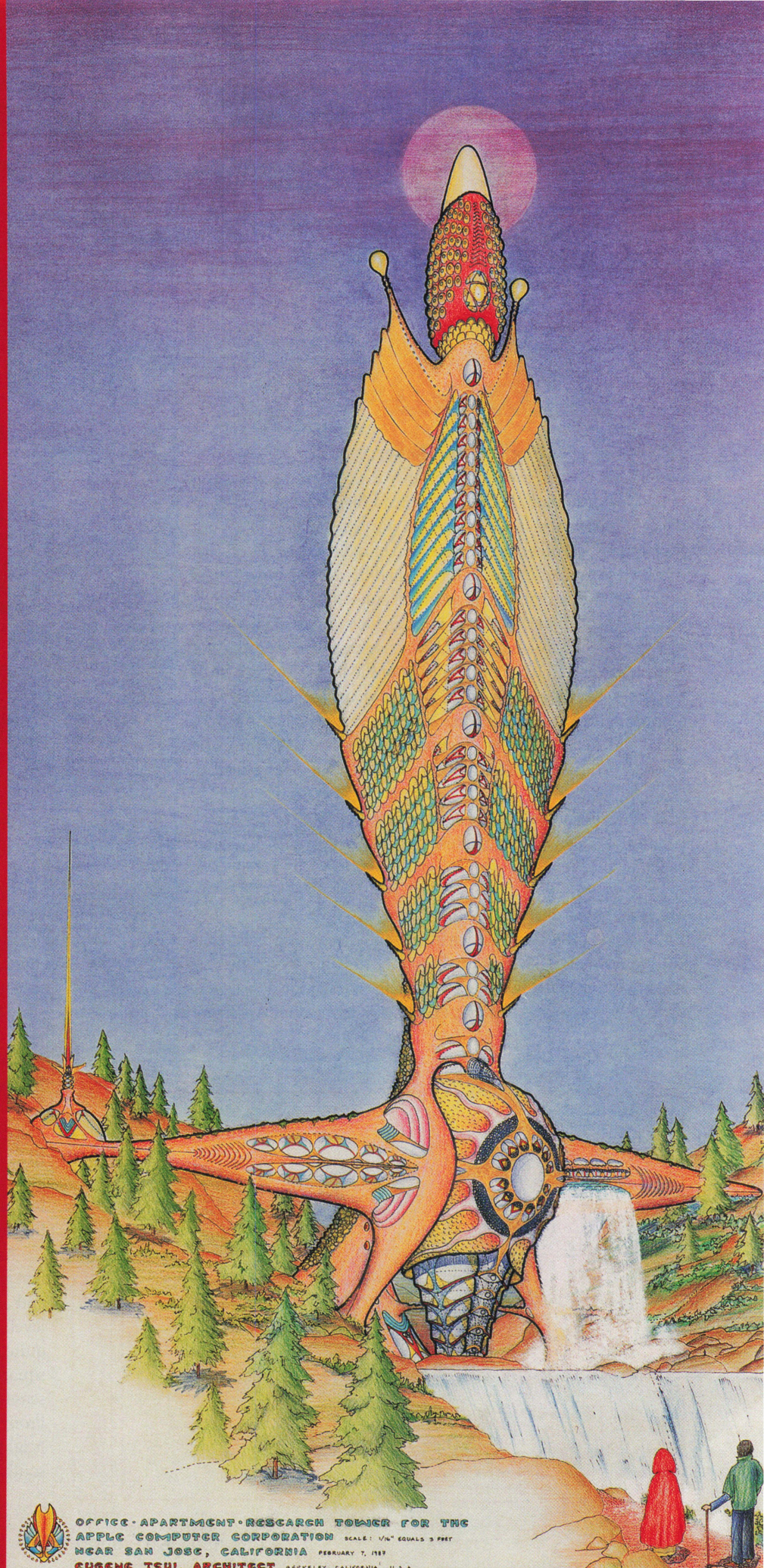
So you get a sense of almost an ethereal, sacred feeling of life coming from above, and that's all designed in because it's meant to create a kind of upward, spiraling feel and reduce the sense of containment. All of these features are a response to a very tight site—it's 35 feet wide by 100 feet deep—and to a region that is know for earthquakes, fires and sometimes flooding, and termites. So beside the program of the owners we responded to the region, to the climactic purpose of the building. In fact, Richard Miner of the Berkeley Planning Board. said that this was very possibly the prototype for the Bay Area for the future.

M2: But "future" is the operative word.
ET: Well, the future *is* the word. One portion of the audience feels the work is too revolutionary, that it doesn't "fit in" with the other traditional modes of thinking of architecture. And my response to that is, "why should a building fit in with buildings that, for the most part, have no thought, no care, and no fullness of execution in them?" There's no real love or passion in those other buildings, so why should we respect them? I'm respecting natural sites and the climate.

M2: Can you give me an example?
ET: For instance, if I were asked to design a building next to the Cathedral of Notre Dame or take the Seattle Space Needle or the Transamerica Tower, or some building that has some thought, some sense of thought put into it, then I would consider how that building relates to the other building. But in most places, if I'm asked to design a home that's surrounded by 1930s bungalow tract housing, then why should I conform to that mentality? When you think about it, it would seem more humane not to conform to it. You have to take into account peoples' sense of security and familiarity with things but life wouldn't be worth living if original ideas were not introduced. It's a dichotomy of living.

M2: Are you taking into account the incredibly fast evolution in technology in your designs?
ET: Very much so. In fact, this work wouldn't be valuable without this acceleration in technology. And that includes biotechnology, particularly in material sciences, and also in electronics, and in...

M2: In what way in electronics?
ET: There's now glass being made that has a certain chemical make up that when you push a button, it suddenly becomes opaque. So you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could create a whole building out of clear glass and you could adjust the amount of privacy and the amount of light coming through.

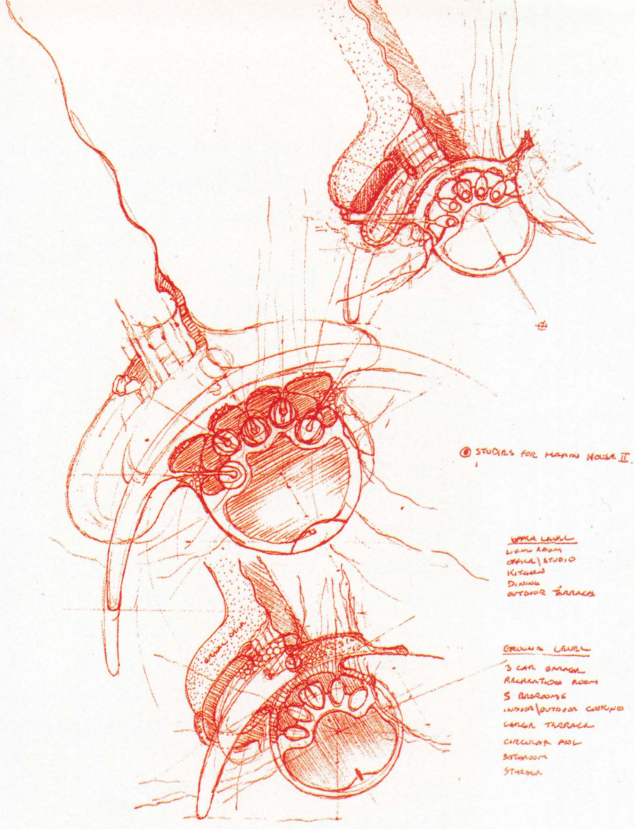
M2: What's it called?
ET: It's called—there are two names for it—*self-shading glass* which has a kind of chemical in it that shades itself, and the other is *electrochemical glass*. Just that one thing could revolutionize the way we think of structures. We could create buildings that are completely open to the sky and to the clouds and to the surroundings around us and we could pick and choose what areas of that building we want for privacy. We think of buildings almost like a cave with windows in it. With this new technology, that's all exploded open. We can see the stars at night, we can see that, suddenly, the sky is the true roof of our consciousness. And it is. Now the sky is really a true sense of shelter.

M2: That doesn't give me much of a sense of shelter [*laughs*].
ET: Give it time. If you were to live out in the open for a while, I think that as far as the eye could see...This could be very useful in the city, because you could cut yourself off from the ugliness and the noise and the pollution and be very secure and have your roof and the upper portion of your building completely open to the sky. So you have a sense of nature coming in.

M2: And then you have your little automatic radar switch, so that when the police helicopters are coming over, it shuts off.
ET: Right...

M2: Some people really need their safe house.
ET: Isn't that because we've created such a noisy, fragmented, emotionally bombarded, emotionally terrifying world, really? So we do all these things to try to escape it or shut ourselves off from it or to just tolerate it as best we can. And we don't need to, because what we need to do is change that world. When you're put in a sterile box, like most of our workplaces are, what does that do to you?

M2: So how does your design directly address these psychological needs? It's a very organic design, and I assume that you've looked into the human mind...
ET: And the physical body. I don't think the two are separate. Our intelligence is our whole being, the whole organism. Take the way we move physically, we move in curves and graceful curvilinear patterns. We don't move in straight lines and angles, our bodies are not made of straight lines and angles and flat planes, but almost of architecture is that way. Why?



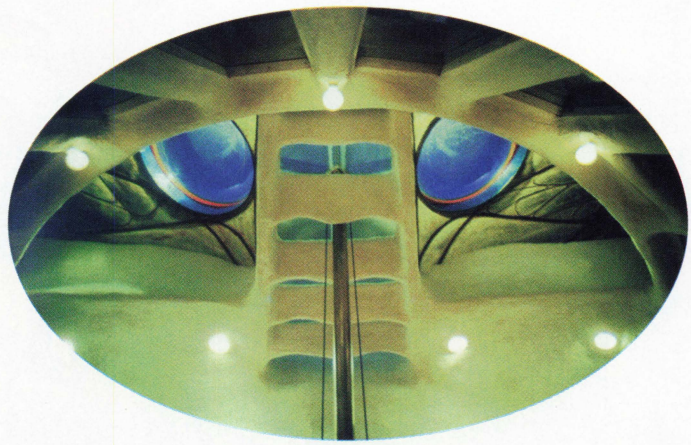
Well, let's not get into *why* yet. The fact is that our natural pattern is to be continuous, fluid and curvilinear. So why shouldn't our buildings also accommodate something about the natural extension of the way we move. Also, if you think about where we come from—our mother's womb—what are the most fundamental spaces and feelings of spaces that we have grown up with? And one is this cocoon-like form. I really feel that soft, curve-like structures are secure—they give us a sense of rootedness to the Earth and a kind of primal relationship with living things that's rooted in our emotions, our psychology and our physiology. By creating architecture that accommodates that, we are addressing and strengthening our basic primal feelings that we're born with, which is reflected in the way we move in our bodies and the way they're shaped.

M2: So what exactly *is* missing here?
ET: We're not taught to understand design. We're not taught to understand how nature works. If you think about it, I think the two most neglected subjects in all of our education is design and nature. What's design? We don't talk about design unless you're in the design field, and then it's pretty distorted by that time. Or, do we talk about nature other than "aren't these leaves pretty?" or "isn't that waterfall wonderful?" But do we ever talk about why nature creates? Do we ever wonder why a grasshopper can jump 100 times its own length? Or how an archer fish can shoot a fly 12 feet away underwater with a squirt of water in its mouth? That's pretty remarkable. Or how an African termite's nest that's 20 feet high can maintain a humidity and temperature of two degrees with an outside temperature swing of 80 degrees, from 40 to 120 degrees in the summertime? How do the termites know that? How do they do it? How do they create those structures? We don't ask those questions. We don't ask how a paper wasp nest can have the same insulator value of 16 inches of solid masonry block, and yet it's thousands of times lighter. Those are the kind of phenomenal things in nature we don't begin to ask questions about, and those are the questions we need to answer. How can a tree limb on an oak tree be cantilevered 30 feet in mid-air and not fall down? We can't do that. Our reinforced concrete and steel can't do that very well, so how is it that nature can do it? Well, we have to ask those questions and find out and then apply that information to our own structures.

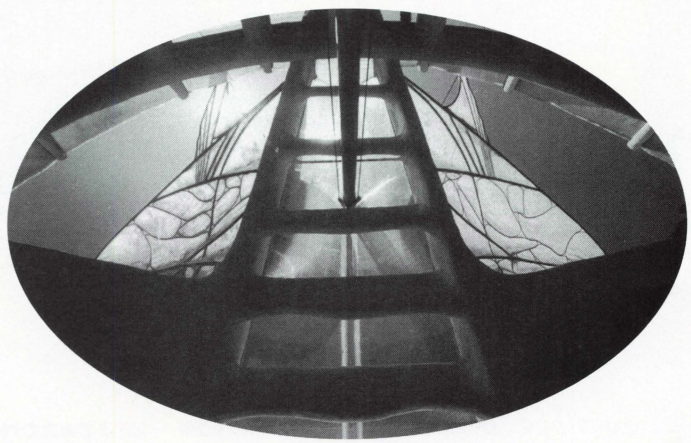
M2: Is that what you're trying to do with your structures?
ET: Yeah. Nature here is all a part of this kind of process, that is, researching these things, asking questions, building models, everything from research and testing to marketing. It's all a part of the process. Many times we will sit down and come up with what we want as an effect. For instance, we have to come up with a material that is shimmering, that is lightweight, that you can't put a hammer through, that is fireproof, and that changes color in different kinds of light. We haven't found such a material. We start calling contractors, manufactures, and usually within six to ten calls, we'll find the material.

M2: Well, what was the answer to that one?
ET: The answer is, Polygol. It's a hollow core plastic, 200 times stronger than glass, cheaper than glass and 1/16 the weight.

M2: Waterproof?
ET: Waterproof, fire-resistant—it doesn't inflame, but if you put a flame to it it will burn but not ignite. And it's made in Wisconsin, and it's UV treated so it won't break down in sunlight, and it gives off an incredibly beautiful shimmering effect, and it comes in many different styles and textures and things.

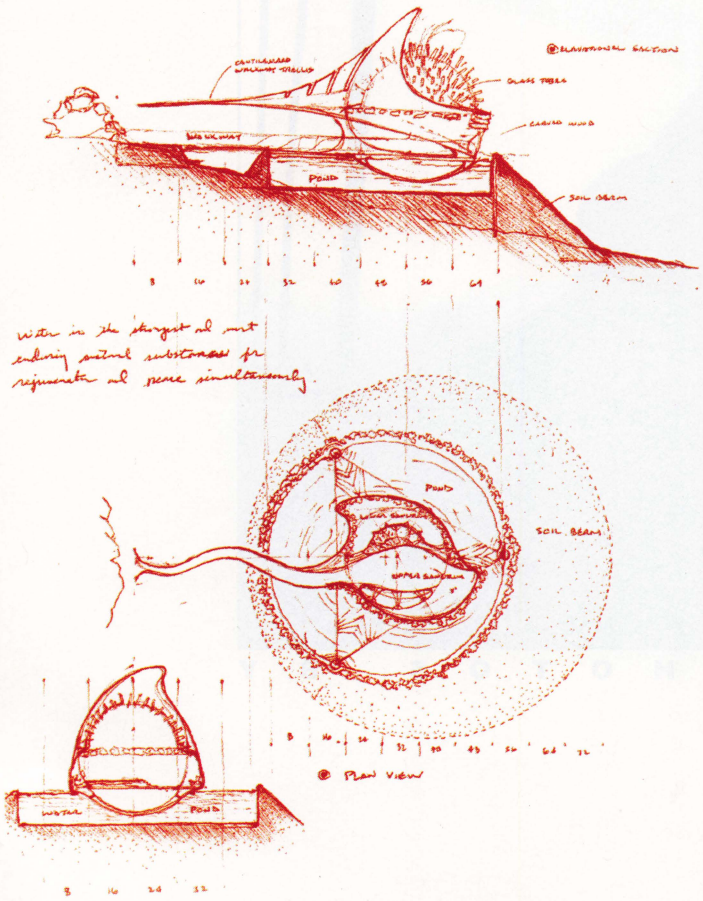


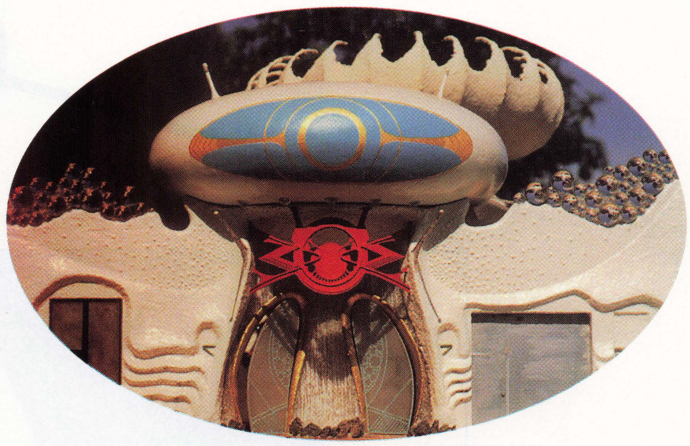
Details from the addition for the Reyes family, Oakand hills, CA.



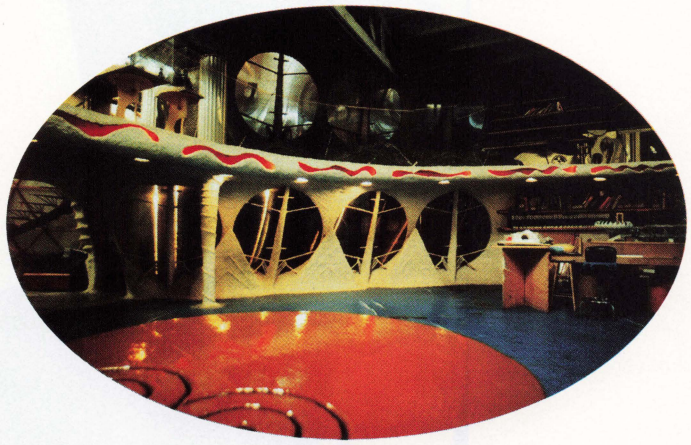
M2: Now, would you ever put that on a window to the outside, though?
ET: We already have—we use it for skylights. Any situation where you want light coming in but you don't want to see in detail the images outside, that's the perfect material for it. And it took us about six to ten phone calls to find it. You can't evolve, you can't originate ideas if you don't take the time to do the research. And we'd better start understanding the intelligence within nature in order to come up with solutions to very desperate and dangerous problems that are plaguing human beings all over the world.

M2: So as part of our next evolutionary step we have to get architecture back in sync with our primal needs?
ET: Yes, because architecture has contributed much more than we think to fragmenting people. When you have a fragmented person, you have a diseased person. The whole meaning of diseased comes from division. I've observed in nature that when there's a separation that occurs either physiologically or psychologically, you create a distorted being, a lopsided person. When you're put in a sterile box, like most of our workplaces are, what does that do to you emotionally and psychologically? I wonder what role architecture played in the sudden rash of killings in workplaces where a person comes in and start to shoot everyone that they can see. Obviously our bodies are responding to something in our environment and that space can make you feel sad or angry or uncomfortable just by the way it's made, so doesn't it follow then that architecture could be a healing factor? But it's not thought of that way.





Details of Tsui Design & Research, Inc. facility, Emeryville, CA.



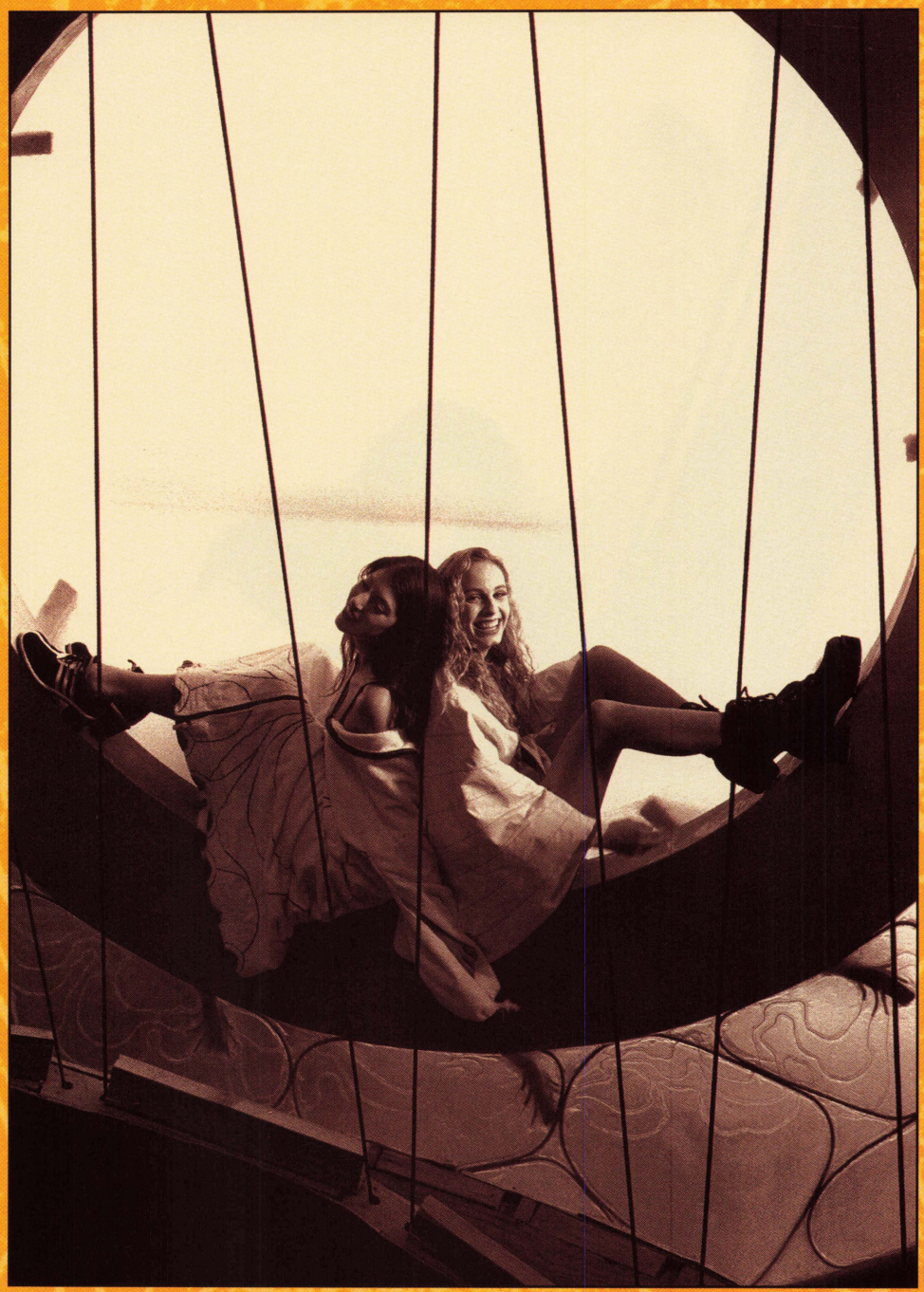
M2: What is evolutionary architecture to you?
ET: The intelligence involved in just a blade of grass is so superior to anything we now know that we're just fumbling around. We're actually quite feeble-minded compared to that supreme intelligence that is in nature. And that's where architecture *ought* to come from—that awe-inspiring sense of this living, incredibly vast and diverse intelligence that just wants to explode with ideas and new forms and diversity. The dead conformity of architecture today is the expression of our collective desperation, our spiritual malaise. We need to work in a more healthy, inquisitive way. We need beauty, humor, courage and energy.

M2: As a prophetic kind of vision, how does man live in this idealized state?
ET: Well, first of all, what it would look like would be that people would express their own uniqueness in whatever way they could. If we could express the way we actually *are*, with the uniqueness of ourselves, I believe everyone would wear different kinds of clothing, they would drive different kinds of vehicles that they would create themselves. In other words, we would be a flowering of innovation and unique ideas in every aspect of our lives. Then how would we relate would be based upon a kind of mutual awareness of our own unique characteristics and God-given propensities, you might say.

M2: It's those propensities they're worried about.
ET: Yeah. M2

FASHION PHOTOS BY

STEPHANIE RAUSSER



The Modds: Rachel and Michelle, from Stars

Make-up by Liza Silver, styling by Kate Enochs

BOULANGERIE

BEAUTY STROKE PARANOIA
@ THE FLICK OF A PIXEL
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FUTURE SOUND OF LONDON

PSYCHE OUT

CHRIS CAMPION

Illustration by John Borruso

MONDO 2000

Future Sound Of London's *music contains viral strains of an alien fiction. Burroughs' insect consciousness. Phil Dick's paranoid schizophrenic projections. Electronic effluvia splashed across a liquid sky. Broadcasting their alienation out to the world, they have produced a number of rare techno artifacts.*

These have been generated almost wholly from within the Analogue Room at their Earthbeat Studio in Dollis Hill, a drab gray suburb of London. This is their space, the heart of the web. Obsessively they record, control and define their environment. All information captured and consumed is fed through the FSOL processing center before being regurgitated and re-broadcast. Recently their activities included a live tour for which, in typical FSOL style, they never left the studio. Instead they mixed new material live for two hours, sent their digital excitations down an ISDN line to BBC Radio One who then transmitted it out over airwaves. Stamping the transmission with their Internet address allowed people to request a compressed QuickTime version of their recent Lifeforms *video. Gigs on the Internet can't be far behind.*

Lifeforms, *as a 90 minute CD of evolutionary pathways, has been received with euphoria, and the 40-minute single version —the fruit of a collaboration with Liz Fraser—is finally set to appear after months of behind-the-scenes inter-record company wranglings.*

Gary Cobain and Brian Dougans find themselves caught between playing the pop star game required by a Top Ten UK album and the anonymity afforded them by the electronic media used to create their public image (or lack of). They recorded Tales of Ephedrina *as their alter ego* Amorphous Androgynous. *Heaping irony on paradox, Cobain claims to be writing a book called* The Psychology of Facelessness *for a future electronic publishing project. This facelessness suggests they see Future Sound Of London as primarily a broadcasting unit—creating virtual performances that are stark displays of paranoia and fear.*

Paranoia isn't confined to their music. Less than a couple of minutes inside their sanctum and accusations of industrial espionage surface. Suddenly it clicks why it has taken over three months haggling the record company to arrange this interview.

Brian is wary, pacing behind the control desk, keeping it between him and the intruder. Gary hasn't arrived yet and the accusations have to be answered carefully if the interview is to take place at all. Mistaken identity, I claim, assuaging his fears. He drops the matter reluctantly.

Today the video screens are blank, images replaced by quiet music played at a soothing volume. Their interview apparently changed but the behavior patterns have not. Brian Dougans stalks around in the far corners of the studio always at the periphery of vision, playing records and rolling spliffs. He smokes, listens, and very occasionally passes comment as Gary Cobain sits and talks, and talks, contradicting himself at the same time as he is weaving the FSOL mythos. It is uncertain whether when Gary says things he is talking for the both of them, or for Future Sound Of London as an entity, or just to please himself. At a certain level of technological sophistication, paranoia becomes the ambient track—which is raw and unnerving itself.

M2: Who's that Girl?
BD: Which girl?

M2: That one. [*points to the FSOL* Lifeforms *Poster on the wall of the studio*] She's the only human element in your public image?
GC: I think electronic art has got very lazy. It sets itself out to be very weird, but it's very Mac-lazy. So we wanted something that, like the music, had a human feel but was put through the machine. So we came up with the idea of, like Led Zep and these old great spliff-up covers, that we'd get a girl.

M2: She's also the only non-digitally created image in the *Lifeforms* video. Is the rest of the *Yage* video going to contain further photographed images?
GC: I think that electronic music, electronic imagery is going to become a very interesting hybrid in the next couple of years. You're going to get very unusual filmic plots getting involved with computing sections but filmic plot's just as abstract as the computer plots.

The next video we're doing is actually an offshoot of this one. You get some of the same scenarios but they act like a game and veer off in completely new ways. It's kinda like a weird remix. Certain elements that you've got in that video, you go inside them and explore them as completely new worlds again. That's how the game and the film are unfolding in a natural evolution, which is our whole philosophical way of writing and making music anyway. Rather than working out storylines, we work and build in the creative environment.

In the same breath, we're developing a game with Sony which is a new kind of philosophical game based on beauty stroke paranoia. [*chuckles*] Rather than shooting people, you just flick into completely different worlds at the touch of a wrong pixel, or right pixel, whatever. And the beauty about this new Sony system is that it's up to the graphics and the sound quality. It's going to be launched next year and it's pretty mind-blowing. For the first time a computer game can handle the kind of images we've been spending years trying to generate.

M2: You seem to be quite happy working in several different media at once.
GC: I think that's the beauty about new electronic music and media, that everyone's a polymath. It's our philosophy that the whole web is there. Music and vinyl, that's a music industry thing, you know? "Vinyl is the be-all and end-all. All roots lead to the vinyl and vinyl is selling it." That's not our philosophy. Our philosophy is that we are creatives that can encompass any medium. We tried to sell our cover to Virgin for £150,000 maintaining that it was a work of art, just because the art field can't quite figure it out yet—'cause they're up their own arses as much as the music industry, the TV industry and radio. All these mediums are really fucking up.

M2: Did Virgin go for it?
GC: No, we retained rights. That was quite important. We're as wide as fuck in a way, but in a way our creative vision, if we don't go for it then in the future somebody will. 'Cause our vision is a time when vinyl is not the be-all and end-all of what we do. We're not going to try and release the radio thing as a live recording, but we could.

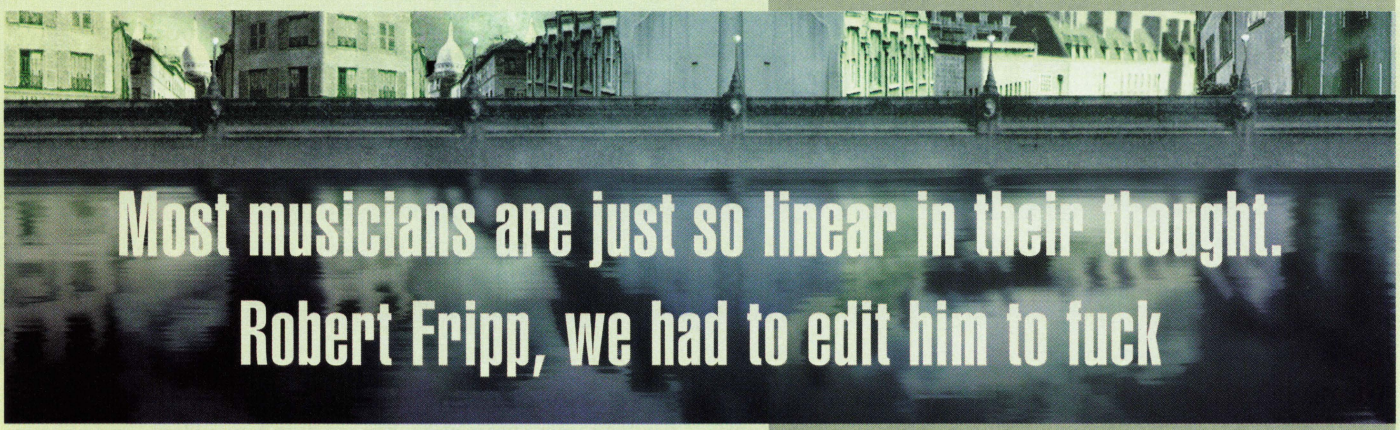
M2: How live was the radio show? Was every performance different?
GC: Slightly, although we have a slight problem with voice content, which has become quite important because what we're trying to do is, we're trying to not only be self-indulgent and play all our own music but also try to entertain people that won't necessarily be lying down listening to our music.

The whole nature of electronic music is changing. It should be about variety and as much variety and dynamic to undynamic as possible, and that's kind of where our heads are now. That actually means that if we mix the whole history of music—which is what we're doing—that's why radio is quite good for us. It means we can nick samples from Rachmaninov and have Miles Davis playing over the top, and really start varying it like we've never done on vinyl. 'Cause the day we present a finished album with four thousand samples on it clear is the day we get dropped! I'm not saying that's a bad idea, but it might be.
BD: It's an option!
GC: It's an option we have open to us. [*laughs*]

M2: What kind of reaction did you get from the tour?
GC: Well, actually we get a lot of letters, and this is where I realize that my whole philosophy is correct because, I get more feedback from radio shows than I do vinyl. That's suggesting to me that we've hit upon a new type of product by doing the radio show. I like that because I think broadcasting should be about giving away stuff, and quality. And industries are very scared about giving away stuff through TV and radio. I think that's all wrong.

We're kind of a high technology/low technology, high budget/low budget contradiction. We can reach people with a radio show and not have to go on the road to gig because we're hitting a couple of million people on the radio show. I think people, if they turn on the radio, which is normally a very passive medium —I'm quite unmoved by it normally—if you just randomly tune into a radio show and find yourself blown away I think that makes far more of a mark on people. These mediums are there to be used.

M2: The performance on *Radio One* was overall much darker than the material on *Lifeforms*. It was quite shocking to hear it being broadcast on a national radio station.
GC: That's the beauty I think. Live radio *is* scary at the time—like the Orson Welles news broadcasts.



Riphead Rex

At a time when digital art is the norm for music industry packaging, Buggy G. Riphead's art stands out from the untidy trail of Mac-lazy KPT-inspired covers. Buggy G. conceives and creates the awesome digital collages for FSOL's music, and his work relationship with Cobain and Dougans goes back some eight years to a project for MTV's Ultratech—a half-hour video of epileptic graphics accompanied by their hard and fast techno. He recently art-directed *Lifeforms*, their 6 minute video that explores digitally-generated alien landscapes and creatures. (The omni-directional tentacled fluid spike was modeled for animation by Olaf Wendt at 2:4; the animation was done by Stuart Gordon at Digital Arts.) It's a trailer for the 40-something minute version, *Yage*.

"There's some intrigue there, but it's not because of the actual technical capabilities or means of production. It's the content that's important."

What he's achieved is an eerie marriage between naturalistic photography and digital nature. He's filming more naturalistic footage to be merged with high-end computer animation—weathered rock formations, desert orchids, ancient temples and that girl rising out of the Dead Sea. The speed of the edits creates an ecstatic montage, a perceptual overload that's both exhilarating and hypnotic.

"I'll show you my latest snaps. I've only been back two weeks now from the Western Sahara. The only stock photograph that we used on the *Lifeforms* cover was the amoeba and the back of the desert. All the rest of them I've done myself. I never appropriate other people's stuff. Travel is sort of my inspiration."

While claustrophobia and friction drive Cobain and Douglas, wild open almost desolate spaces fuel Buggy—and it's the marriage of the two make FSOL such a confusing proposition: remorselessly ethereal, starkly oneiric. As for the ephemera that populate his landscapes:

" I dream quite a lot. I dream a lot better in the desert. I'd like to create something very hyperreal, very surreal, not in reverence to it, but some of the stuff Salvador Dali was doing. It's visual poetry, that's what I'm trying to create. I think Ansel Adams said something many years ago: *in the presence of extraordinary reality, consciousness takes the place of the imagination.*"

M2: I can appreciate the fact that if someone had turned that on halfway through they'd be just like, "What the fuck?"
GC: [*laughs*] There were some quite heavy sections in it. The beauty about it is it's so fucking viable! Radio stations are thinking, "The way they cut in these voices is far more interesting than our top DJ's They've got all these different perspectives, these philosophies coming out of these speakers." And you don't have to believe in them!

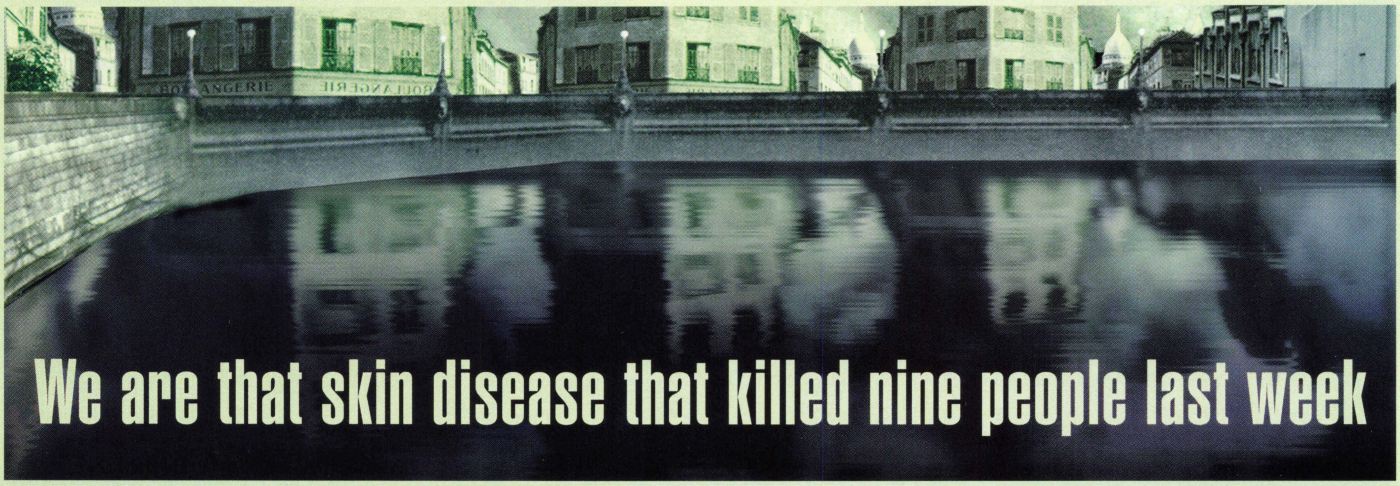
We might use an actor's voice or just cut out a line and have them speaking to somebody else from another film, and give it a weird abstract meaning. And yet you feel more from it than you would from a direct DJ and that's quite evocative. That means we've got fifty DJ's in one show.

We've both tried to be DJ's. The first radio show we did we tried to be DJ's and I spoke. I was doing similar things to what we're doing now but in a lot shallower sense. That's why we moved on, because I was incapable of becoming this actor. We both became actors for a period of time. We were doing these scenarios, quite similar to now but we didn't have the depth of Bruce Dern's voice or whoever.

M2: Does it scare you?
GC: Yeah, well... I don't know how much longer I can continue. [*nervous laughter*] 'Cause it does take you to the brink. You've got to remember that our philosophy is that this is basically a recording environment, and we record everything.

It's like the *Video Diaries* [*a DIY-TV show on the BBC—eds*] which I think make very interesting television. If you put the camera on yourself long enough, and then edit the bits, then I think you are as interesting as anybody else. Certainly as interesting as Janet Jackson and her three minute pop promos.

M2: A lot of your press seems to suggest that this studio is pretty much a hermetic environment, and that you spend an unhealthy amount of time working in here.
GC: Again, things change. We've tried to cut it down; tried to quell the illness. It's not that we work here all the time. It's that everything in our lives, unfortunately, is about collecting audio and visual and that means that what used to be game machines, like having a video camera, we used to derive immense pleasure from going out with a video camera years ago when we didn't own them—now I have to take them round with me. To go the park! I am working 'cause I know I'm collecting. It's digital sound. I'm collecting digital sound from around the park that I can sample! And in that way we are always working and we're always completely lagging behind in our lives. We're just like electronic librarians. We're behind in the history of sound, and sound is just going on around us right now. And I'm missing great samples. In that way we're always working.



M2: You also made the *Yage* video available over the Internet during the broadcast. What's your impression of Internet as a medium?
GC: Internet's a weird one. So far I've found it quite an interesting medium. I think what's happened is that we've had the extreme sociability thing, and we didn't find it fulfilling and have become reclusive for some reason although we are lovers of human beings.

I think we're an electronic illness and we're coming through radio stations now into your home. In fact we've already had a couple of letters about guys who have been fornicating and stopped midway. It's like yeah! Within a month that guy's going to be sterile if he keeps listening to us. We're an impotence that means there's going to be no babies born in this country, and we're going to come through TVs soon and have the same effect! We are that skin disease that killed nine people last week. This weird bug.

M2: Ambient music creates an alternative space for people to immerse themselves in and escape harsher and more mundane realities. Is the music your escape too?
GC: It's not an escape. It's a horrible, brutal face-to-face mirror that surrounds me. I think our music is sordid in how honest and how reflective it is. The other thing about it is it's very much narcissistic, it's totally us and our space.

M2: That sounds kind of obsessive.
GC: It is, actually. FSOL is very obsessive, because I've got a lifetime and we've got to think of so many areas of communication and creativity that we want to pursue, and I just want to see them, not understood more, but I want to achieve some of them. Because I think in the future what we're talking about will just be natural course. I think you will get that amazing film that is audiovisual in a new sense, not in the sense that it's been around for fifteen years.

Everybody talks about audiovisual now. It was like this cool thing from the 80's that the Cabs [Cabaret Voltaire] and everyone else had espoused. The idea is to take it into dedicated spaces—as we perceive cinema and the sound system should be.

M2: Which is?
GC: Well, it's probably us performing in a throwback to the 20's in an orchestra pit. So we'll be playing live but you won't look want to look at us!

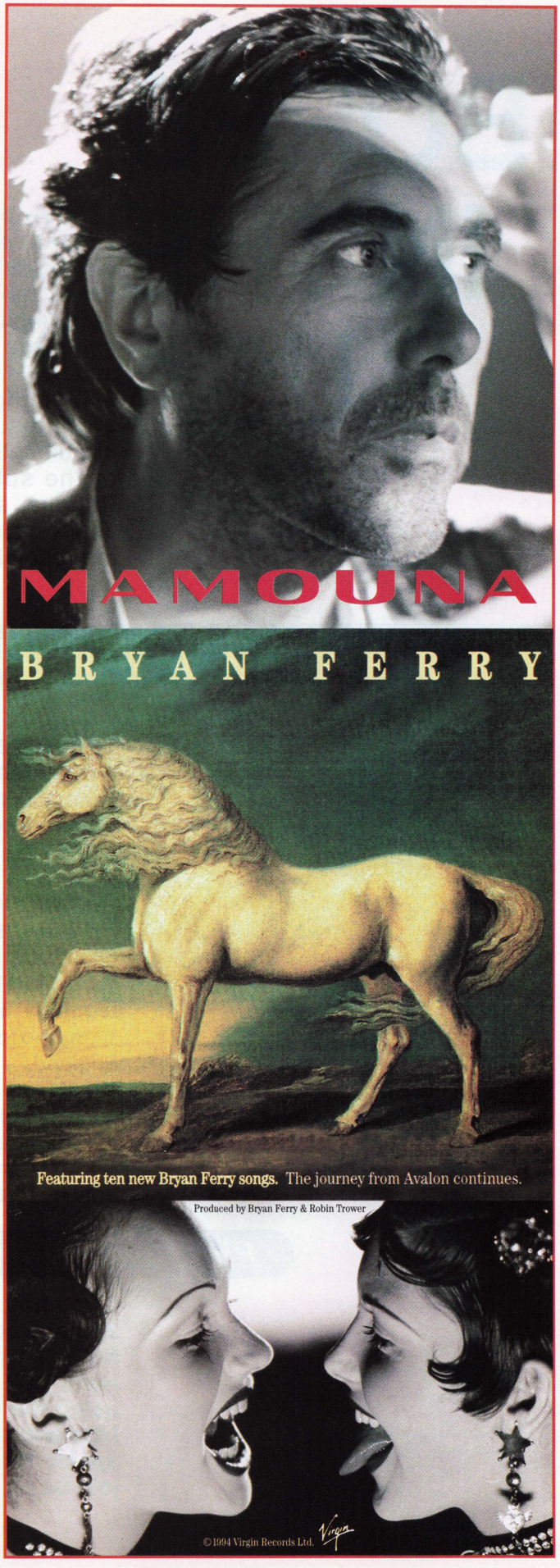
M2: VR technology would seem a logical step.
GC: Maybe we have too much of this old ego in us still that we are presenting product that is non-interactive. It is something worth thinking about, but obviously at the moment the technology isn't quite there. Our music does represent this great spatial surround which would obviously be fucking great to experience within the world that we are creating—in some kind of helmet and interactive land—obviously that is *there* but I'm not sure.

M2: Why did you choose to work with Liz Fraser on the *Lifeforms* single?
GC: She's one of the few vocalists that we find really evocative. Most musicians are just so linear in their thought. Like Robert Fripp—we had to edit him to fuck on that radio show because he typically wanted to play across it.

The whole analogy with us to a band would be: if you've got a stage and you try to present it as a band you'd have like 2,000 musicians each of whom came on stood around for 95% of the gig and then just raised, say, their flute and went "whoot!" Musicians would just feel too uncomfortable doing that. It might be brilliant in terms of the listening thing, it might really benefit from that flute only coming in once, but that flautist would feel so uncomfortable; they'd want to perform. That's the musician's natural instinct, to have the flute going all the way through it. The guitarist wouldn't be able to stop—he'd be all over the track! He'd maybe pause for one bar. The drum would go all the way through it. That whole method of self-indulgent musicianship is over for us. And Liz Fraser has that non-linear look—I thought so anyway, but she's far more scatty than that; it's bizarre.

There was a really heavy editing process. Then we had all the overlays, because what she does is she has a little cassette recorder, she listens to it a couple of times giving prompt points. Then she completely wings it—ad libs it—and she gets this kind of mess and starts overlaying it to get structure, to try and accentuate certain bits. So it's really complicated. That day in itself and from there onwards was quite a mess, to actually get that track into fruition.

M2: Has all the delay and politics involved in trying to secure a release affected how you feel about the single?
GC: I have a typical ambiguity. Hate it, love it, dead to it, all emotions.
BD: It's fucking excellent! [*laughs*]
GC: You always get really worried about me criticizing our own music. Suddenly you think that people out there are going to...
BD: I'm not worried! It's that *I like it.*
GC: ...people out there are gonna go, "He's right. I haven't even heard it, but this guy who made it says he's not sure about it so I'm not gonna buy it. I'm not interested!" You think that's the most interesting thing I'm saying, you know? I don't think people are that easily led, actually.
BD: All I'm saying is I like it. I like what we do.
GC: There's the positive interview, quick! There's a positive page and a negative page. There's the hippie in the corner who likes everything. We're great, you know! M-2


MAMOUNA
BRYAN FERRY
Featuring ten new Bryan Ferry songs. The journey from Avalon continues.
Produced by Bryan Ferry & Robin Trower
© 1994 Virgin Records Ltd.
Virgin

BORED IN THE USA

Like an apotheosized A-bomb going through a troubled adolescence, Osaka's Boredoms have burst onto the unsuspecting music world with a brilliance that stuns first-timers by its sheer newness. By turns manic and explosive, brooding and quiet, then whimsical and awkward, their music and stage presence rocks harder then the most intense metal and rap. But just when it's hitting hardest and the group is screaming loudest in their barbarous "Bore-language," it switches to a naive and spastic introspection that short circuits all expectations, pushing the audience into the realm of the sublime. With a new mini-release *Super Roots* on Reprise, along with the re-release of their 1992 *Pop Tatari*, and a main stage appearance at Lollapalooza, the Boredoms are ready to wake up America.

THREE DAY STUBBLE MEETS THE BOREDOMS

THE BOREDOMS ARE:

EYE YAMATSUKA—frontman and human explosion. Eye's earlier band Hanatarashi (snot-nose) set records for destruction and human endurance.

HIRA—assist and evil genius in the guise of a calm, long haired rocker.

YOSHIKAWA—vocalist and master of the post-apocalyptic gesture, he tweaks the knobs of his noise gizmos, then screams and covers his head grimacing.

YAMAMOTO—guitarist extraordinaire, Yamamoto also plays regularly with John Zorn's Naked City. Mr. Suave onstage, Yamamoto is to the Boredoms what James Bond is to England.

YOSHIMI P WE—the female side of the dual(istic) drumming force. She also blasts forcefully on the trumpet and spazzes out soulfully with her vocal chords.

ATARI—the male drummer, all pigtails and smiles until he freaks out, then it's hell with a beat.

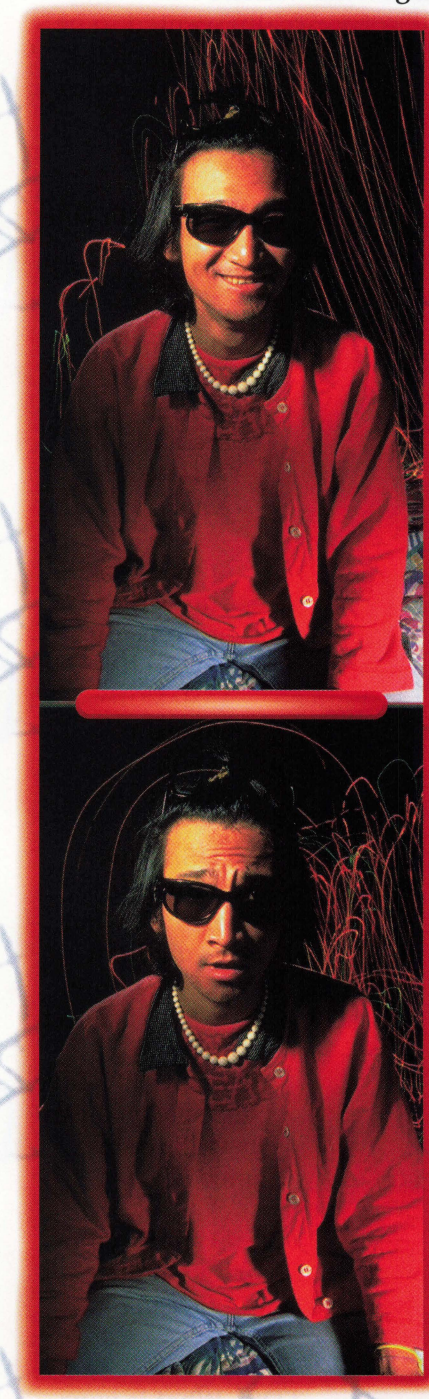
Photos by Nori

Our chat took place at Portland's UFO Museum and the 24-hour coin-operated Church of Elvis. My band, Three Day Stubble was on tour with the Boredoms and we were showing them our greasy, Brut-cologne-scented world. They were using their alien powers to force us into giving up our NASA hats and stickers, and taking them to the West Coast's power spots. We dressed them up in polyester and coerced them to join us onstage to rub, wiggle, and play Nerd Rock.

-Mr. Hungry

TDS: So is it true that Osaka is the second most expensive city in the world?
YOSHIMI: Yes.

TDS: After Vegas. But Vegas is only expensive if you lose.
YOSHIMI: No, Tokyo is the most expensive. In Osaka a cup of coffee is four dollars, in Tokyo it's six.



TDS: Does that come with free refills?
YOSHIMI: No, but we always bring our own pot to avoid the expense.

TDS: Is that why people are forced to drink their own urine?
YOSHIMI: Yes, Eye drinks pee.

TDS: It's true?
EYE: Yes, I drink my own pee, for medicinal purposes.

TDS: How often?
EYE: Every day, maybe. The morning is the best time.

TDS: Isn't it stinky then?
EYE: Like sea water, salty.

TDS: Are there free refills? Eye, we heard you sleep eighteen hours a day.
EYE: Recently, I've cut down to ten hours.

TDS: Does it make you sleepy when drink your pee?
EYE: No, it's an upper.

TDS: Do you sleep right after you get off stage?
EYE: Sometimes.

TDS: Have you ever fallen asleep on stage?
EYE: Once.

TDS: That's interesting considering the intense, otherworldly energy that you generate on stage. Do you think about where that energy comes from?
YOSHIMI: It's not something that we think about too much, but it's definitely a strong cosmic energy. Something takes over and we just let go.

TDS: And when you're on stage, Yoshikawa, you're always making these weird gestures, grimacing, hugging yourself and covering your face with your hands. What are you doing then?
YOSHIKAWA: The stage is just too hot.

TDS: Really?
YOSHIKAWA: No, when I move around like that I'm drawing pictures with my body.

TDS: And where do those pictures come from?
YOSHIKAWA: From the music, and from things that I see when I hear it. Also from things that I feel inside. I don't like to look back at myself on video,

though. I don't tape any of my solo performances, it's too painful.

TDS: We like that pain. Is there an audience reaction that you like particularly?
YOSHIMI: We like it when people dance around in a really strange way. Or roll around on top of each other.

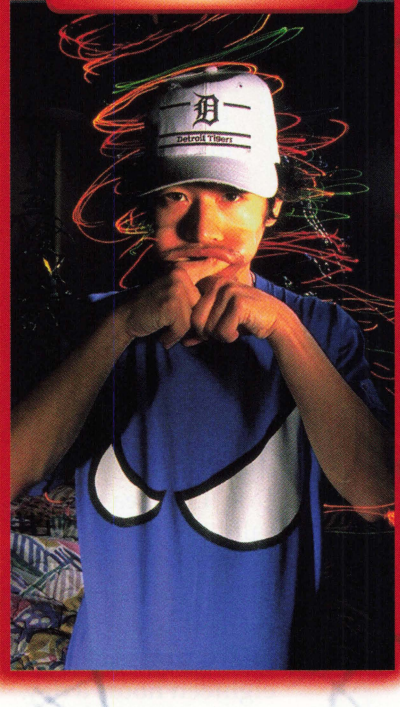
TDS: The love pit! What's the reaction to your music like in Osaka?
EYE: So-so.

TDS: Where're you the most popular?
EYE: [*laughs*] Osaka.
YOSHIMI: Sometimes we play in really strange places. Like one time in Japan we had to build our own stage from steel with hammers and nails. Then, when we were done playing, we had to take the whole thing down and clean up afterwards.

TDS: What do your parents think of the Boredoms?
YOSHIMI: My parents love it! Even my grandmother came to see us and really got into it. But she felt a little sick afterwards.

TDS: Why?
YOSHIMI: Even if it's they like it, the Boredoms music is a lot for anyone to handle, especially grandparents.

TDS: What are you junkies for?
YAMAMOTO: We're all junkies with things, but only for a little while, then we forget what it was we were fascinated with. When I was a kid I really wanted to be a baseball umpire. I learned all the rules by heart.
ATARI: Fishing.



TDS: What do you see yourselves doing fifty years from now?
ATARI: Fishing slowly.
YOSHIMI: Boredoms.
YAMAMOTO: Dead.

TDS: What kind of hobbies do you all have?
YAMAMOTO: Onanism.
YOSHIKAWA: We have contests.

TDS: How about you, Yoshimi, what do you do in your free time?
YOSHIMI: I collect Snoopy.
YOSHIKAWA: I have pet Sea Monkeys.
HIRA: I love my Gameboy.

TDS: What's your favorite game?
HIRA: *Elevator Action.*

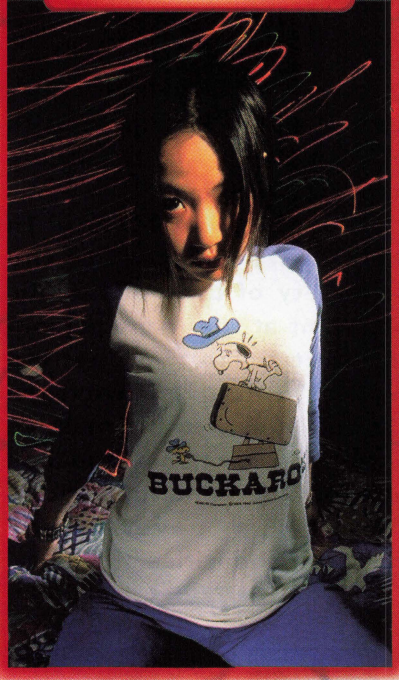
TDS: What is your favorite TV show?
YAMAMOTO: I like cooking shows. There's a certain kind of show in Japan where the challenger battles a master chef. It's very challenging.

TDS: What's your most embarrassing moment?
YOSHIKAWA: Existing.

TDS: Have you ever met any famous people?
YOSHIMI: The daughter of the old Emperor.
YAMAMOTO: I met the daughter of the biggest Yakuza member in Japan.

TDS: Were you scared that your niceties would be misinterpreted?
YAMAMOTO: No, Osaka is pretty cool.

TDS: But all of you have all your fingers?
YAMAMOTO: Yeah, not many rock guitarists are members of the Yakuza.



TDS: So you have to wait till you quit the band to join. And by then you have to cut off your whole hand.
YOSHIMI: How did you guys meet to join Three Day Stubble?

TDS: We met in a drug rehabilitation program when I was twelve—and we met Sal on tour. He sold us a late model new used car. How did the Boredoms meet?
YOSHIMI: Hari and Eye met at an Einstürzende Neubauten show, and Eye and I already had the band *UFO or Die*.

TDS: Ahh... outer space: Satan's realm...
YAMAMOTO: My dad is an astronaut.

TDS: You must have had to drink a lot of Tang.
YOSHIMI: The two drummers in the band have both seen UFOs several times.
ATARI: Yes, when I was three years old and when I was a high school student I saw them.

TDS: And did they take you aboard?
YOSHIMI: I'm pretty sure they did, but erased my memory. Yamamoto, too. He seems changed.
They did something with his head.

TDS: They made him smarter. He has that look. With all the references to UFOs in your band names, and the way your t-shirts look just like the alien eyes in the UFO museum in Portland, don't you think the evidence is just piling up too high? Admit it, you're space aliens!
YAMAMOTO: That's why we have dust in our navels and you only have lint!

PURITY

Between logic and love, between technique and ritual, between language and the body lies the shadow. A space that has been hijacked by hierarchs or exiled to the land of the mad, bad and dangerous to know. A space that religion draws a line around but doesn't dare to enter. A space that ravages the mind and excoriates the flesh. The space of the shaman.

This is the territory Bill Laswell inhabits and where he's staked his claim with his label Axiom.

Bill Laswell photos by Thi-Linh Le

Axiom features a deep fusion between Western and Eastern sounds, gathering talents as diverse as the Chinese theatrical composer Liu Sola, jobbing guitarist (and big figure in Queens) Nicky Skopelitis, Last Poet Umar Bin Hassan, and anarchist of the occult Hakim Bey. The Laswell working method most resembles Bey's political theories of the Temporary Autonomous Zone—come together in secret, work fast, get out while the going's good.

Axiom is the public and acceptable face, installed within the belly of the beast at Island Records. Older labels like Celluloid and Enemy have been discarded like so many outmoded scales but they've been replaced by Subharmonic—the dark side of the vision with titles like *Sacrifist*, *Doom Ride* and *Execution Ground*—and now Strata, the spawn of Subharmonic, which devotes itself to sinister ambience from the malevolent alter egos of Blind Idiot God and Buckethead.

Laswell's also set up shop in Japan with Black Arc breathing new life into OG funk.

TAZ's within TAZ's in labyrinthine profusion—the sheer variety of Laswell's public offerings hint at the many personalities that lie in wait behind Laswell's quiet Midwestern façade and spill into his massive network of connections—a loaded paradox of hive mind and prickly personality, a never-ending sweatshop of sonorities.

AND DANGER

FEATURING: LIU SOLA • NICKY SKOPELITIS • HAKIM BEY • UMAR BIN HUSSEIN

M2: I'm glad to see you're keeping yourself busy. How many records do you make a week?
Bill Laswell: It's kind of a step by step agreement with Island. Whenever we've done five then we usually go back in with an idea or two. We never take for granted continuing with the label, there's always the feeling of at any moment you could be terminated. I think people in the company are really amazed that we still exist.

M2: So it's not like the structure of being in a large company presents problems?
BL: Yeah, but there are advantages. It's not like the company's going to fold. We have budgets so that when we go to Africa we can pay people very well. It's kind of unheard of.

NICKY SKOPELITIS At this point, Bill is very prolific. What you have is somebody really conscious of getting a result, somebody manipulating the environment himself, a will, while not inflicting himself on the possibility of the situation. Bill allows that arena to have a living, active participation in the event. It's an establishment of open systems. It comes from techniques to make environments exist, whether it be technical, financial, creative, whatever—the list goes on. It comes from a lot of directed subversion into areas that are well-established and shouldn't—and usually don't—have anything to do with the kind of work that we are associated with. Infiltration techniques to combat a certain propaganda, a certain acceptance by a larger demographic, and turn it in on itself. Whatever the personal needs might be, whatever the communal needs might be, that has to be done, that has to be executed.

M2: So are you motivated by becoming a hub?
BL: Not sure. I sort of see that by doing this for a long time and creating labels, I'm a catalyst for a lot of combinations. If you get enough people dependent on that, you add a little more respect to that responsibility. It doesn't take much to organize a few situations where people can make money, travel and do things. If you're in that position, it's a shame not to take advantage of it. A lot of it is responsibility to keep a flow within a community. [*phone rings—brief interruption*]

M2: What's the idea of Axiom then? To create a funky world-music-that-doesn't-suck ambient kind of feel?
BL: Hopefully a little more than that. I see a way of incorporating ambient music into Axiom. But as far as the harsher music goes, I can do that over time, but I wanted it to flow naturally, without any fractured leaps.

M2: But your résumé is a history of fractured leaps and sonic assault.
BL: But that's in a broader sense. It's nice to have things with a flow 'cause people get involved in that as a listener and they feel a commitment. People who do ambient music don't understand why I do the noise music. They'll send it back unopened. Well, it's only a matter of time before that's ambient music. Everybody else has to take things step by step. I respect that. People have other things to do.

M2: Sounds like a Leninist revolutionary program.
BL: Sometimes it seems like that.

M2: Do you see your whole group like revolutionary cells?
BL: Yeah, we sorta see that. I mean, without having a philosophy or a theme—or even a structure—it definitely works that way.

HAKIM BEY If Bill likes my stuff, if that makes me the official philosopher of Axiom—we should probably propagate that myth. All the stuff that I do is anti-copyright, which means I want people to do that. Because participation in commodity is not the overcoming of commodity. A kind of neo-liberalism out there wants us to participate in our own oppression. Help the Police! Beat yourself up! Have your own workstation at home so you can be a slave to yourself! And all the electronic democracy we've heard about... Take the Internet. There's a real resistance—Clipper 2 or Clipper 3 or however many tries it takes them to get it right and to crush the cypherpunk movement. And it could easily commodify itself. It's already being used to push product. It's turning itself into a commodity.

Advertising as we know it is finished because the media is being decentralized. This is not the revolution. Advertising is being assimilated and diffused throughout the culture. We don't need the subconscious anymore because we have advertising. Now advertising itself will disappear and the subconscious will move into new and even more hidden areas. The last ditch of advertising is all this authenticity stuff—"the real thing." This is not the end of the commodity world. This could be the final transcendence of the commodity.

That's what makes Bill so interesting. He's trying to push the real himself, or dance on the fence in-between. Maybe he'll fall one way or the other. It's a balancing act and it's going to be hard to keep up forever. But the music industry, like the advertising industry, is flailing around for meaning, a new direction. The one thing that makes him strong in that wacky world is that he's the only one who knows what he wants. They're desperate to keep that industrial growth going. So it's a post-post-modern irony that Bill Laswell can create these TAZ's within TAZ's on the basis of some kind of psychic ruin of the music industry. Camping in the ruins. Ballard, Moorcock, all those guys—it's their landscape.

UMAR BIN HASSAN You have to make people aware of what's going on around them, and how they know it. In these times, with all this talk of the information highway and how it's constructed, there's no comment about relation. You've got to make sure that it's really radical. They're all hung up on advertising and democratizing and baptizing. They're just trying to veil their mission which is to have control over that themselves.

M2: Actually, I heard it said Axiom had an official philosopher—Hakim Bey.

BL: We would be willing to call him that but there's a lot more to that writer. When I found TAZ a few years ago, I thought that was the new area I would pilfer a few themes from. I thought it would attract people's attention. It might suggest a kind of alternative, or maybe this is a threat to something that's not real. There's a lot of phony music around and people don't have the background or the experience to know the difference.

M2: So what do you call phony music?

BL: There's so much I don't know where to start. I always gravitate towards people who have conviction and power and feel the will of what they do. But without even looking for it, I see a lot of posturing and insincerity about the whole idea of being a musician for getting famous.

NICKY SKOPELITIS If I do take a space to make a certain series of notes or clusters of notes happen, it's like a series of sounds strung together to create an event, a dynamic within the piece. I don't even consider myself a a soloist. Most people take solos and it's just kind of an aimless exhibition. I'd rather listen to something very repetitive. A seduction of rhythm will enable you to create a certain feeling. It doesn't have to be an intellectual experience. It can be something primal and physical, something you can't articulate in language.

On *Ekstasis*, that was the idea of calling the series of pieces, or rhythmic patterns ecstasy, that you were beyond your senses at that point. That's a very ambitious title, but it's a nice title, I thought. Music could drive you beyond your senses, outside of your body.

And there's an incredible amount of people working repetitive ideas, continuing the repetition of the same song or the same group of songs or the same record year after year. To me rock and roll was old when it was happening. To continue on for twenty years with the same image and the same sound, the same chord structure and songs, it's pretty much impossible for me to imagine how someone could do that. With a lot of other musics too. [*phone rings*]

LIU SOLA "World Music" is to pick up someone from the village to play what has been played for a thousand years. They think if you don't play your traditional music, you're not Chinese or Russian or whatever anymore. What they record is Museum Music.

In world music, I see people just grabbing the things that appear to be esoteric or ethnic, putting it together with something else and passing that off as something that's meant to be tribal or have meaning. In fact in most cases, it doesn't. People don't know the difference. They haven't been to the source of that information or that experience.

M2: Right. I wanted to talk about colonialism.

BL: That's happening a lot in music. Appropriating to the hilt, especially in the ethnic music. It's not really a collaboration, or an exchange, or a relationship—it is colonialism. Taking, appropriating, and getting out.

M2: Yeah. There's two poles of what's going on. Yours and the RealWorld approach.

BL: I try not to attack people in the press. It's too easy to say these guys are fucked up and not doing good work. But lately it's getting hard to avoid certain issues.

M2: Like the Paul Simon Experience?

BL: People could say to me, how do you feel about Paul Simon, and I have to think a little—that was the guy who was in Simon and Garfunkel, right? I mean, you don't really change that much. So who cares? I mean, David Byrne... I don't have anything against those guys, but they were lightweights from day one. Peter Gabriel's a real nice guy, very humanitarian. I know he loves music and he's not totally responsible for anything that might be naive or even misplaced at that label, but he's a pop star. That's pretty much what they do. It's a full time job being pop stars. I mean, it's a sideshow.

M2: So give me an example of how to do things the Axiom way.

I just came back from Morocco where I was recording a Gnawa master called Mahmoud Ghania, a real Gnawa who plays the full range of that music tradition and is born into that family of Gnawas. It was easy to find everyone else because they were more showbiz oriented. There are some good players in that area in the North but it's not the same thing.

This is the heavy music. It's where people go out and are in trance and the older people who know how to navigate in that trance are with them. He has the power to lift them up, to bring them down; he could kill, he could kill with the sound. But I didn't want to make just Gnawa music, even though he really is the guy, the greatest, I thought I'd just be repeating myself. I thought it would be interesting to take someone who had that power from somewhere else. So I took Pharaoh Sanders, who has all those qualities.

UMAR BIN HASSAN We—I mean the Last Poets—were very young when we were into the third world revolution idea. We've come to understand a lot of things take compromise. But we still have the ideals to make them understand that they have the power to lift themselves out of the frustration or the isolation or the degradation or the deprivation or the humiliation that they're feeling. That's been our job from day one.

With Pharaoh there was something holy and ancient, born in America, comes from Arkansas, but I believe that holiness, that sound comes from way back and way below what you can do with words. So I took him to Essaouira and for me it worked musically, exactly what I hoped for. And so that's my version of trying to create these kinds of projects.

M2: Sounds like that project Ornette did that still lurks in someone's basement.

BL: Yeah, I have some of that. And I actually have some videos from Nigeria...[*bell rings*] That's someone coming to drop off something. [*Bill disappears briefly. After "someone" leaves, it turns out it was Anton Fier*]

M2: But you've been accused of colonialism yourself.

BL: Well, it's probably a different type of criticism. With the early 80's African thing, African kids were really into technology, really into drum machines, synthesizers, cheesy hip-hop things. They loved it. It's really those people who wanted to do that kind of sound. I thought that was funny. Then people started to say "you're killing African music."

LIU SOLA Since I left China I had all sorts of difficulty because either people treat me like, I'm Chinese, I should be a total folk singer, or I have to do House music. And some people think "How can you be a composer, you're Chinese? How can you compose Western music, Western structure, and how can you write Western instruments? You have no right to do composition." So I have a right to play traditional music with one melody, one tone, right?

That's very colonialist. You Chinese are only supposed to have one thing, otherwise follow me. Then I met Bill. I said I want to do China blues. Europeans or English, they would think how can Chinese sing the blues? Bill said, let's do it! So we made an arrangement to mix up Chinese musicians and a blues band, and also mix up storytellers.

And that wasn't African music anyway. It was filtered through Paris and London. They weren't master musicians at all, it was showbusiness musicians involved in that. I certainly wouldn't ever have approached Ma'hman and said let's hook you up with some hip-hop beats and a DJ. Although if he wanted it, that's good too.

RealWorld had a record, fairly new, called *Trance*, and it's by a guy called Hassan Hakmoun, and he was this guy in Marrakesh who played for tourists. And he had a kind of a look, and he would wear the Moroccan outfit, and then he came to America and got in with a certain crowd, I believe David Byrne, the whole thing that will get you to RealWorld. And that's what's being presented to the world as Gnawa.

This master, these people, they'll tell you the truth about that playing which is the opposite of anything real and it's actually blasphemous and against anything they believe in. That music, you have to be born into the brotherhood in order to play that. And there's only really three families in the world. So again these people are only appropriating.

HAKIM BEY I recently spoke about boundary violations and even spoke about penetration in a positive sense. Two feminists and AIDS activists got up and started shrieking. I had to explain about the civilization of safety, of protection, the therapeutic ideal, the banalization of health. I had to start from scratch to explain my position. They'd become so convinced that communication was evil, that touching is evil. This is something that has infected the left, the right and the center. There's this neoGnostic body-hatred everywhere.

The bad relationship everyone has with their body runs from the body obsessives with their health fanaticism to the cyberwimp who has no body and can't wait to jack in and disappear forever. The social is seen as a viral reality by some people, and in fact by the social itself. I find myself in the position of defending the virus.

It's like making the move from pornography to intercourse. So the imperialist appropriation is being overcome from within. This is the space where all the contention happens and where all the pleasure happens. That's why we're doing it. Maybe it means the world is coming to an end. Who gives a fuck? What it means to me personally is I immerse myself in all this beauty and wisdom and pleasure from the whole world and become a real rootless cosmopolitan, as Stalin said. At the same time, all the particularities come back.

M2: Well, since you mention it, what's more blasphemous than the collage form?

BL: People are doing that all the time. It's like synthesis is the only true means of regenerating or recreating the whole. When you do it a little more blatantly direct and a little bit wider, that throws people off. All things are collage. The whole sensibility that makes up even the Gnawa Brotherhood is a collage of different sensibilities from black Africa, Islam, Sufiism, to music that came from Mali to Guinea, from hunting, from hunting to Guni, influenced by the Arabic, that's a collage.

M2: So how do you search for integrity in the mosh?

BL: I don't think you know when you're maintaining integrity, but at least you have respect, and you have to find out where to put your respect 'cause you can put it into some fake stuff.

NICKY SKOPELITIS The usual accusations like calling it World Music...it just means how I've grown up in Queens, how I've lived. This is a completely liberating experience and at the same time it's communal. Bill hasn't become, let's say, the Bill Laswell Show. And that concept of cross-cultural synergy, as opposed to some kind of appropriation, was to me very well articulated. The natural progression of people evolving into something else, mutating into certain groups. Personal contact, personal experience, and the ongoing work. Things change and mutate all the time. The problem that we have as musicians is that we're unable to articulate this stuff in language which is why we're probably playing music in the first place. Our facility is not within language; our facility is with something else.

It's just really about getting to the source of things and getting the information. The information is translated in a lot of other ways, it's not through language, it's not through speaking. I don't

think it's the thing where we'll have the exact perfect document that's going to explain to us the difference between right and wrong but the thing is there and it's way down underneath. That's what I'm interested in sonically and musically, spiritually, whatever.

M2: Are there any words you can put to the experience?

BL: These are not intellectual people, they couldn't talk about much of anything. It would be like pouring a cup of tea for an hour. It's all happening through the power of music. It's power music when it's in its place. I hear it in Coltrane's music. I can hear it in ambient music, in Noise, and I don't have the switches to say this is this kind of thing and this isn't. If there's any such thing as having a job, mine is to find and preserve that quality and those expanses and those things.

HAKIM BEY Music is metaverbal, a meme without the logos. You can never trace the philosophical influence of music—clearly it's got to be one of the most powerful of all—because it never starts to verbalize. When technology transcends itself and disappears up its own asshole, the space is left for the reappearance of the primitive, the archaic. All these terms that signify the past are inadequate today, because it's not a question of the past. It's a dialectical return on a spiral or a gyre. I'm not interested in bombing myself back into the Stone Age. What's happening is the Stone Age is returning.

The fact that we as Westerners can hear this music that to our parents was like insects whining on the front porch. Psychedelics had something to do with that but psychedelics were themselves symptomatic of this space that was created. And into that space is coming all of that stuff, the archaic, the mushrooms. The Terence McKenna elves are rooting themselves into that space, and the music from Borneo, the pygmies, the music from Madagascar, the Middle East is rooting itself into that space, and prehistory and anthropology and ethnology all of that is no longer bugs in a laboratory to us—it's vital information. Whereas the first people who began uncovering this stuff where British and French colonial agents and spies—they wrote all this down but they despised it, thought it was savagery and nonsense. Once we get past "these stupid senseless poor fucking Arabs," we have the demographical data to say "Yes, I want to live like that."

So people are proud of being Black, Native American, Celtic. Many lost paradigms shall return, are returning. Shamanism—not just in the backwoods of Mexico where it was preserved all these centuries, but here in New York. All of this flowing together is a TAZ. I'm not advocating it, I'm describing it.

That was a real exchange between those two groups of people. It's like a dream, it's one of those experiences where while you're there it's very much all one experience. The music is very much the soundtrack of that experience.

M2: That sounds like an Axiom record all right.

BL: I hope this one will translate like you're actually there. Like we would walk through the Medina playing with a mike, and a guy would run up and start tssh tssh playing his instrument, or a kid'll say something, then that gets put into or traded into a natural performance.

I'll try to do a booklet with as much images of that experience as possible. I may write something that's even political in a sense—because this is a real thing, it is a brotherhood, it is a way of life. It's about life, and it's not just showbusiness appropriating an image and a sound and doing something with it. But that happens a lot in all sorts of music. What they've done with that guy on RealWorld is make it out to be that "this is some kind of Gnawa master living in America, it's great." Whatever. It's just a kid.

M2: You're a pretty angry guy. And you fronted bands like Painkiller and Massacre with fucking controversial images. How did Mr. Spiritual end up as the metal jazz king?

BL: Watching John Zorn develop. Whenever he wants to do projects, I tend to do them. When he started to entertain the idea of hardcore, groups in Japan like SOB or a bunch of bands in Osaka—Napalm Death were doing a similar thing—when he had the concept of doing one to twenty second blasts, he got more involved in that energy, met Mick Harris [*of Napalm Death and later Painkiller—eds*]and now he's doing a lot of hardcore techno stuff, ambient stuff, he did this stuff called Lull, and he's working with this guy from Old called Jim Plotkin. His new band is Scorn.

LIU SOLA The reason I compose this way is I'm afraid of boredom. I always changed my subject and I always change my style. If you structure too much, it kind of goes south. If you're floating too much, it can be boring too, because you go too far away. Both put together, it's kind of a balance—positive/negative, yin/yang, whatever, it sounds like a pretentious idea [*laughs*] but I like to put them together.

I think it's really opening up, and when we do these things and call it Painkiller, it's more based on just trying to create energy and with Zorn I'm trying to create musical communications with energy or even music sometimes. That's not always the absolute form that we're feeling. A lot of it's just sound and energy. Early on with Massacre, later on with Last Exit, and I guess Painkiller is the third volume of noise music and physically aggresive structure.

M2: You make it sound clinical.

BL: It can be. You can make that music by thinking that way. Not that we have ever structured even. You can map it off without ever discussing the pitch or the key or the formality or the phrase or beat or tempo or anything.

Lui Sola photo by Ira Cohen

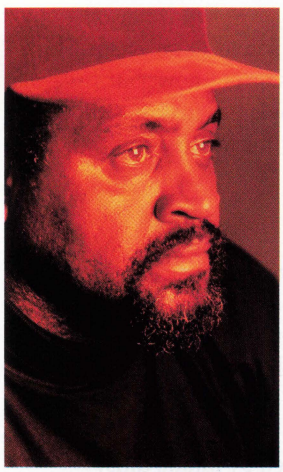
NICKY SKOPELITIS I'm not going to tout my kind of input on *Ekstasis* because we didn't want it to be a conscious experience. It was really healthy, really democratic, and at some points very surprising and fun, which was like, people don't have fun anymore. And basically, in the way most people perceive their daily work schedule, I'm not conscious half the time.

You have to understand, most of the time Bill will ask me to work on something, I'll go in, I'll have no idea what the project is, who it's for, what label it's for, the music, none of it. I'll just show up, we'll have a good time doing it, and I'll leave. It's like this other kind of state. It helps getting things done. Maybe months later I'll find out what record it was. I mean, I'm grateful to have my name on it because I like the record, but I really have no memory of half the things I do.

I think that's interesting to be able to shape some musical experience by how it looks—just tssh tssh tssh. [*gestures*] I can think in my head, I can see that it can be put together.

M2: So with this mixture of spiritual and aggressive energies, are you thinking of music as a magical force to move energy around with?

BL: I think it is that, definitely. And those are just two points. Things happening all at the same time—it all creates a flow that is the sound, that's the wave and that's where it all is, it's in there. You can experience that or keep going.



UMAR BIN HASSAN Some of us have our own trials and tribulations. I had to look inside myself to understand that I had constructed this demon in the name of survival of Black manhood in America. Sometimes that demon still comes up for me and catches me off guard. This episode with OJ Simpson [*...of the car chase—eds*], that Black demon in him, that survival demon in him, he's 46 years old, he's rich and was on top and had things in control before that demon came out of him. And there's a lot of Black men in America that were raised with that feeling of being rejected when you really need somebody.

I'm dealing with a thing that can pick me off any time. People have got to realize that I'm dealing with a very real thing, 'cause there's a lot of bullshit from Americans. Americans are the best make-up artists in the world. "Everything I've said is so good and so correct..." And that thing with O.J.—of course he was a Black man, but there's a whole lot of white men running around pretending to be on top of it.

Music, the language, it's a power, a magical force and a healing force—but you have to begin to understand how powerful it is because you can take it and misuse it, fuck up yourself and fuck up other people too.

FUTURE SOUND OF LONDON
Lifeforms (CS/CDx2)
"More than just making spaces, FSoL shoot you through them like you're on some river raft or exotica flight simulator... Lifeforms builds a vivid ecology, a sonic Biosphere II that simulates Gaia's steaming jungles, lonely ice caps, and bleak, hazy deserts on some chilly digital plane." -Village Voice
FUTURE SOUND OF LONDON
"Lifeforms: Paths 1-7"
(12"/CD)
A 39-minute maxi-single that journeys through ethereal ambience, pulsing dance rhythms and exotic world sounds. Featuring vocals by Liz Fraser
SPACETIME CONTINUUM
Sea Biscuit
(CS/CD/LPx2)
"...and on the eighth day, God slipped on his smoking jacket, puffed on a blunt, closed his eyes to the sound of this celestial California dreamer and handed in his notice." -Melody Maker
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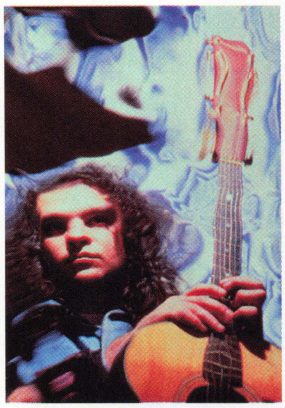


NICKY SKOPELITIS Paul Bowles said that in areas of the world, music is functional—don't exclude the Western world. Music is used to make you feel well, music is used to heal the sick, used as a weapon, used for a lot of things. Just as it is in certain privileged environments. Music is a fundamental force. We can be entertained by it, but it's more specific when it's functional. What Bowles said: what's in our music is that it is used as a catalyst, inducing trance in order to drive out certain spirits or what were called natural energies, to make certain natural energies react to it by creating an energy yourself. So yeah, it can be achieved as well with a lesser community, that's all.

M2: I was thinking of the 7-finger high glister and the Hoodoo in TAZ.
BL: There's a lot of things in Hakim's work. A lot of the pure information, he incorporates it and gives you a more natural and broader understanding. And the autonomous zones where you create different spaces where you can function create and fluctuate independent of the abusive things outside. And that's what we're all doing anyway. All these different things compressed into a different tiny space.

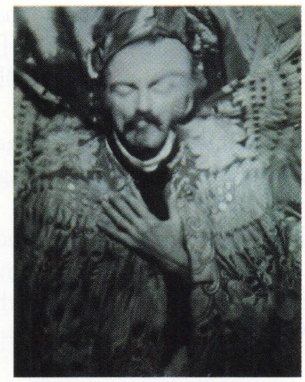
M2: I see the new record is TAZ. Who plays on this one?
BL: There's a piece about the Tongs with this Chinese pipa player called Wu Man. And Buckethead is on it. But it's not a lot of playing. It's creating a sound I thought followed under the voice. I did a lot of the collage bit myself.

M2: Did you put this together like wallpaper?
BL: No, it was hearing the words first, the phrasing. The references were specifically Persian, or references to Hassan i Sabbah. That's pretty direct. There's a big sound and it has a lot of reference to Persian music, to North African music, to Turkish, Chinese—and harder textures, industrial rockish sort of sound. Anything you hear, or even read, immediately establishes an image or a sound, no matter how subtle it might be.

In other musics, they say every sound has a scent. Even in Gnawa, there are seven sections of trance, and each part of the ritual has a color, each color has a smell, like an incense, and then every color and every smell has a story, and every story has a movement and a theater like an act, and it goes from the most peaceful, right down to dying, the ceremony of the black, where people actually take razors and play rhythms on themselves and mutilate themselves, and other cermonies where people go off into a bag and get sealed off—it takes their life.

HAKIM BEY Clearly, the extent to which everybody lives through the media, or rather doesn't live through the media, has begun to become a problem of conscious alienation. I take a clear theoretical view. Our most conscious activity should be to overcome that alienation by a technique I call Immediatism. Obviously, a record is another medium. It's a way of getting in-between, it's not seeing people in the flesh. But so what? We started doing this as an experiment in a different form of marketing. We're actually encouraging people to pirate the CD and so on. How can I put it? The TAZ excludes media; ultimately, it tries to exploit media.

Obviously, real Immediatism would involve telepathy and teleportation, so there's never pure 100% immediacy. There's never 100% pure alienation. Everything's basically impure. But we can begin to hive off areas of conviviality, otherwise, the TAZ doesn't have a chance of appearing. It cannot appear just in the media. The media can bolster it up, the media can prepare the way for it—although I prefer what I call the intimate media, like telephones and BBS's and so forth. For example, public access video, there's a tricky question. It's all so low-tech, it's kind of stupid—that's probably its saving grace. [*laughs*]



The whole idea is based on the situationist idea of drift. That's very important. Everybody wants to nail things down. It's a natural impulse when you have a beautiful experience to nail it down, make it keep on happening. A certain openness to drift is required

That's no different I think to fitting a sound to an image. Like I haven't worked a lot in film, I'm just starting now, but I see that I'm getting so much experience improvising, juxtaposing things quickly, that I think it's going to be easy for me to do. I'm looking forward to it.

M2: What's the plan?
BL: I've done little things. With Liu Sola we did music for the Michael Apted film on China called *Moving the Mountain*, and Brett Leonard's doing a movie called *Hideaway* this summer. And *Destroy All Rational Thought* about Burroughs and Gysin—it's a little video, these things are just starting. [*phone rings*]

M2: Do you always find yourself interrupted by phone calls?
BL: Pretty much. But none of it's been interesting so far. At the moment I'm involved in a lot of things. There's definitely a lot of characters involved. It's good to get out of that too. I'm glad to be getting out of that to Germany for a while.

M2: Can you imagine doing this anywhere other than New York?
BL: I think if I did, it would be very different and I would lose contact with a lot of people that I'm working with. I think for what I'm doing right now, I have to be in New York. I've thought about doing stuff in Japan and more in Paris and even Tangier recently, but it would completely diminish the amount of the work.

M2: So how important to your musical identity are the core characters?

Photo by Ira Cohen

BL: It depends on what I'm doing. Everybody's kind of crucial depending on their place in whatever project. Other times, I do a record where I don't use anyone, I even make up names of people who played on the record. The second Praxis record was done with a painter called Rammellzee. He finally ended up being not on his own record. The tracks were completely changed and in two days, the tape existed and I didn't have a name for it. John Zorn said, "Why don't you call it *Praxis*? That's what it is."

A lot of stuff on Subharmonic is like that. And the duets coming out with ambient artists, like I did one with Pete Namlook on the Fax label—in less than two years he made 110 CDs—and another one with Jonah Sharpe of Space Time Continuum, one with Tetsuo Inoue, a Japanese ambient artist. And those are just live duets—one of them was done in one take, some of them are more involved in the programming. And there's a techno project called *Chaos* which is all loops, samples and machine sounds, and that doesn't involve people—it's all records.

It's unfortunate that that word has to be used to describe a lot of interesting music. A lot of hard stuff like Jeff Nail's stuff, and what Mick Harris is doing.... *Chaos* is in that area, abrasive, really fast.

M2: Are you going to spend more time in that area and abandon where you're at?
BL: No, see, I'm doing a whole two-CD set, sort of an ambient translation of the whole Axiom catalog. I put all the records together and do ambient mixes of jazz and African records but sort of as one-extended-experience/sound thing. I want to get a lot more into that. I've done tons of ambient stuff lately. I'm going to get much more into that and the techno stuff.

M2: Do you find yourself going into very different spaces in your head when you do these different things?
BL: I think so. It was really nuts to do this Moroccan thing and then do a Painkiller gig. It felt pretty dissonant.

M2: Is there a Bill Laswell who stands back and watches, or do you just hurl yourself recklessly on?
BL: I'd say it's the hurling. M2

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THE INQUISITION

AN INTERVIEW WITH
AND DRAWINGS BY

DAVE SIM

David S was woken up by a knock at the door. It was a summons to central processing. After a brief journey through a number of identical streets and corridors, he entered a dimly lit room. It contained a bare wooden chair that looked as if it could take some punishment. Across the room, behind a heavy and intricately carven desk, out of the light, sat an indistinct figure.

"You know why you're here, of course. But let's run through the formalities in any case. You are the notorious creator of a satirical comic book by the name of* Cerebus*, are you not?"

"Guilty as charged."

"You claim to be able to produce this work, independently, until you have completed 300 issues, which will take you well up into the next millennium."

"Pretty much."

"And you have entered into imprudent self-exile from the maternal confines of the industry?"

"I'm sorry, was that imprudent or impudent?"

"David S, I'm afraid that the remainder of the questioning will not be so comfortable."

The figure snapped it's fingers and two men stepped from the wings to bind his arms. The one on the right hesitated.

"Excuse me, Mr. S, but we're probably going to have to break your fingers. Would you mind signing these before..."

He proffered a stack of graphic novels—High Society, Church and State, Jaka's Story, Melmoth—*and a few stray issues.*

"Sure. No problem. I could do a sketch for you, if you like. Do we have time?"

"Time is something that no longer need concern you." *The figure spoke quietly but effectively.* ***"Bind him."***

DAY ONE

Shadowy Figure: Read the charges.

Faceless Minion: David S has ruined the comic book industry.

DS: Definitely. And continues to do so.

SF: You admit your complicity, then, in the black-and-white boom and then the independent boom, with the express intention of creating widespread bankruptcy.

DS: Wait a minute. You can't... If you walk three quarters of a mile away from a disaster site and they start building mutant disasters that are a mixture of you and the original disaster—I don't know if I would take the blame for that. If it hastens us towards the day when we have one creative field where the creative people are in charge, well, there's going to be casualties. I've ruined the comic book field by just pointing out that all we need is an artist with a certain amount of business aptitude and you can get rid of all the hangers-on.

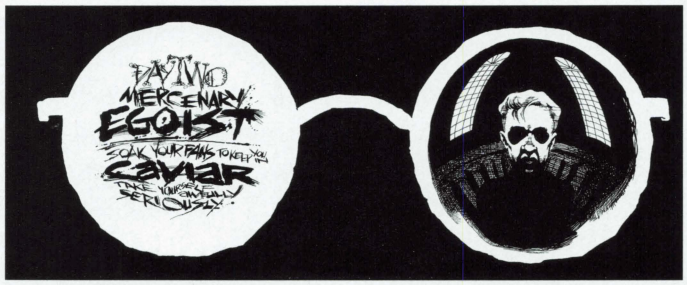
SF: So, you blame the *parasites* running the industry.

DS: You called them that. But let's call it what it is. Once you have people with a certain facile aptitude for creativity but whose chief attention's on the almighty dollar

then you've essentially created two mediums and one is going to prevail over the other. We can avoid that in comics because it is possible to run your own company. And consequently you can have this thriving virus in the heart of the body politic. It's very difficult to wipe out or modify.

SF: And parasitical creators?
DS: Hey, an intellectual property is what all the new wealth is based on, and that's why we have this acquisition mania to own film libraries, to own somebody's complete songbook, because it continues to produce revenues out of proportion to the investment. It's a capitalist's wet dream.

SF: Are you saying that intellectual property shouldn't be saleable?
DS: The biggest problem we've had in the field is that people who do get fucked over don't come out in public and say "Yeah, I'm making nickels and dimes, everybody else is making money out of it." You might get a little money off the back end but essentially whatever amount you get when you sign over those rights is built into the equation, and no company will hand over enough to sue them.



SF: To press the point, you think the exploitation is a travesty. Or perhaps there's an exception.
DS: No I don't think so. I can't even picture what it might be like to stand back and see the complete opposite of what *I* wanted to do being done with *Cerebus*. Sure, you don't spit in a well you might have to drink from again. But that's no consolation to the kid who comes in and says "I know how the game is played." They know how the game is played until the game starts to play them.

SF: [*smugly*] David S, *you* are a parodist. You play pretty fast and loose with intellectual properties yourself.
DS: Sure. But then, I also use it as a centerpiece of my belief that anyone can use *Cerebus* for whatever they want. If they think they can do it better than me, or do a version of it that's more popular, I'll be happy to see what they can do with it.

SF: You don't mind them stealing your fire?
DS: In a creative way, the only way to win is to go toe to toe. If brains were dynamite, there's not enought to blow up a paper bag in the entire bureaucracy of the mainstream. It's like fighting somebody with two broken legs. But when somebody has a huge multinational behind them, that seems like an unfair battle on that side, so, let's call it even. Let's just see who comes out alive on the other side.

DAY TWO

SF: Read the charges.
FM: David S, you are a mercenary egoist.
DS: Hey, your instinct as a creative person is to be your own dictatorial person. What are the boundaries of this? I'm beginning to realize it's self-imposed. No one's telling you what to do. "You always have to show a pair of feet on the page." "All of your panel borders have to be drawn by hand." I don't fall for that. I've got idiosyncrasies like that myself, but why do we say every one of my stories has to have a scene like this in it? Is it your trademark, is it your signature, or is it just a neurosis?

SF: Your only signature characteristic is breaking the rules, even your own.
DS: Oh yeah. I like playing with expectations. There's a thousand different ways to tell a story. The book I'm doing now, it seemed a really good opportunity to play with every expectation I had set up. Stalemate every one of them. "He doesn't do pointless fight scenes." Well, now we've got five issues of pointless fight scenes. I'm not getting much reaction except mute disbelief. Circulation holding firm. It's an interesting Mexican standoff.

SF: You can hear 20,000 people holding their breath.
DS: The sound of grinding molars is enough to keep you awake at night.

SF: You're taking yourself awfully seriously.
DS: I don't know if I'm taking myself too seriously. I have to balance it off. When you're a pioneer, the first one out on the trail, you have to be very conscious of the people coming after you. What happened to Elvis? What are you bastards going to do to me? Take your best shot. Turn me into something I didn't intend to be.

SF: I think I speak for everyone. We liked your funny ones best.
DS: All you people left a long time ago. It's been a nice winnowing process. People get absolutely disgusted with what I'm doing, say it's not as good as it used to be and leave, but they're replaced. I just move across the spectrum of taste.

SF: That's a cavalier way to treat your audience.
DS: Um, I suppose it is. but you have to choose between two loyalties, your loyalty to the storyline or your loyalty to your audience. I don't know the audience. When I do meet them, I meet them for 30 seconds, a minute, a minute and a half. I've been living with the story for 16 years. It earns a very, very good living.

SF: Your aim in life, in other words, is to soak your fans enough to keep you in caviar.
DS: No, that's a façade. Sure, once I get out of Kitchener, I spend like a drunken sailor. First class air fare, hotel suites, whatever I want, whenever I want... If I were really trying to soak the fans, I'd be doing the whole art print limited edition thing. When you've got a circulation of 20,000, you've got in there about 200 high five figure, low six figure incomes who are willing to buy whatever you put out no matter what you charge for it. As long as they're buying the comic book, as long as they're buying the reprint volumes, that's soaking them enough. It's going to cost them 180 bucks for the complete story thus far. Asking more than that sounds a little greedy to me. Can I get something to eat?

DAY THREE

SF: Read the charges.

FM: You are self-obssessed.

DS: If you say so. I wouldn't necessarily...

SF: Why then did you bring yourself to the forefront of the book, disrupting all continuity?

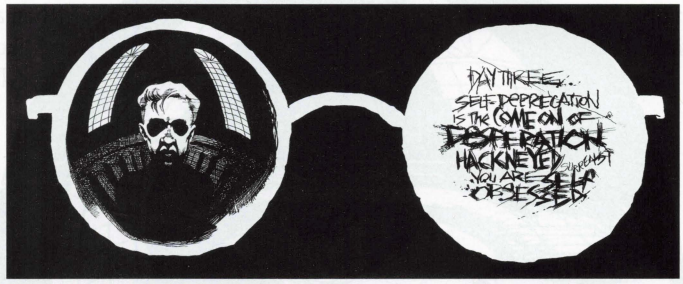
DS: I haven't done that. I brought Victor Davis in.

SF: Who happens to have the eye of David S, the friends of David S, the comic book of David S.

DS: Strictly coincidence. The thing I hate about autobiography is people won't admit that they're slanting everything in their own favour. He might put in embarrassing confession as a way of deluding you into thinking this is candor. But it's another evasion. I pick the episodes in my life that reinforce my thesis, and I'm not going to pretend I'm doing anything else.

SF: History is always written by the victor, eh?

DS: [*laughs*] Of course. Autobiography, you win. You get to the point where you can write a book about yourself, you've already won. Just getting away with it without people saying "who's that sodding bastard talking about himself, who cares?"



SF: You overestimate your audience. They want to find out about Cerebus's ear.

DS: That's good as well. I'm not that interested in myself. It's all I can do to stay awake typing now. It was fun at first, but now I really don't want to think about me any more. I want to get back to pure creativity.

SF: You're making a bastard form. An incredibly bastard form.

DS: A sodding bastard form. It's belligerent. Do you really have to portray yourself as in love with the audience? I never really have thought that. If I'm at an Eric Clapton concert, he's on the stage, I paid for the ticket. It's self evident. You don't have to run around trumpeting it, but it's interesting to point it out. At least to me.

SF: The reader is the most important one. It's happening in his head.

DS: That's an excellent point. That's why I dragged the reader into it as well. Otherwise it would be imbalanced.

SF: Answer the question. An impure form , like opera, which is obscene...

DS: How the form is seen—people are always looking for credibility for comic books. I like being not famous in a medium that is not well thought of. That allows me the observer status. When you're a famous writer, you're now the observed. By choice, I don't *have* friends so I'm always observing things at a distance. I'm the same with relationships. I go to bed with women, then I don't go to bed with women. It's never "I really should merge this with my life, become half of somebody." Friends and lovers are visitors in my life.

SF: This has made you think of yourself as a society of mind. A solipsist.

DS: Oh yeah, definitely. I tell people that what a human being is, I'm not one of those. Emotion just doesn't have a context. It's inhuman relative to how we perceive human beings being. They say "Your work shows us clearly that's not true." What they're talking about is the emotion I play with in the work. That comes from observation. I don't feel it, but I certainly see it in other people. Emotion as a force. A gravitational force, a destructive force, a postive force, but not something I want to play with. I'm certain if I tried it I would really like to have a kid, and I would come up with endless reasons why it was a good idea, but the same could be said of heroin. I don't see love, friendship and heroin as being altogether different. I'm well over into pure, not thought, but creativity. That pure energy force that infoms creativity. Hey, I've only got 80 years, or if I keep smoking like this, 60 years. Can I get another pack?

SF: Self deprecation is the come-on of desperation.

DS: There's no question. Am I the aloof distant observer as a kind of affectation? Am I the aloof distanced observer in the interest of cuddling as close to creativity and keeping the impurities away? Am I just afraid to connect with people? That's certainly 90's politically correct thinking. You're just afraid of a deep meaningful relationship with a real woman. Well, you've got to define your terms. If you mean a barracuda who's going to devour half of my existence, no I'm not looking for Yoko. A nice Dallas cheerleader, for a few consecutive weekends, now that sounds good to me. But then Lennon, he was someone who was living a day to day Alice in Wonderland existence. His lyrics are like, yeah, that's what the world looks like to me. When I look in the headlines, that's nothing like what the world looks like to me. There isn't a word for a mind like that.

SF: A hackneyed surrealist, perhaps.

DS: Or a mystic. *No one I think is in my tree, I mean it must be high or low.* I kind of like it that way. I don't think he did. I think he liked to have someone in the tree with him.

DAY FOUR

SF: [*Angrily*] You're a purveyor of millennial frenzy!

DS: Sure, that's one of the things I set out to do. When I decided to do 300 issues, there was a foot race to the year 2000. I wanted to have something planned for that. Attempt to say what I think a millenium is about. I mean, certainly, starting to see a certain amount of the Messiah syndrome. That we will have a decade of would-be Messiahs leading up to the AntiChrist. The media and the cult of the personality service an undercurrent of that. I'm more interested in the gravitational movements. What's pulling, what's being pulled.

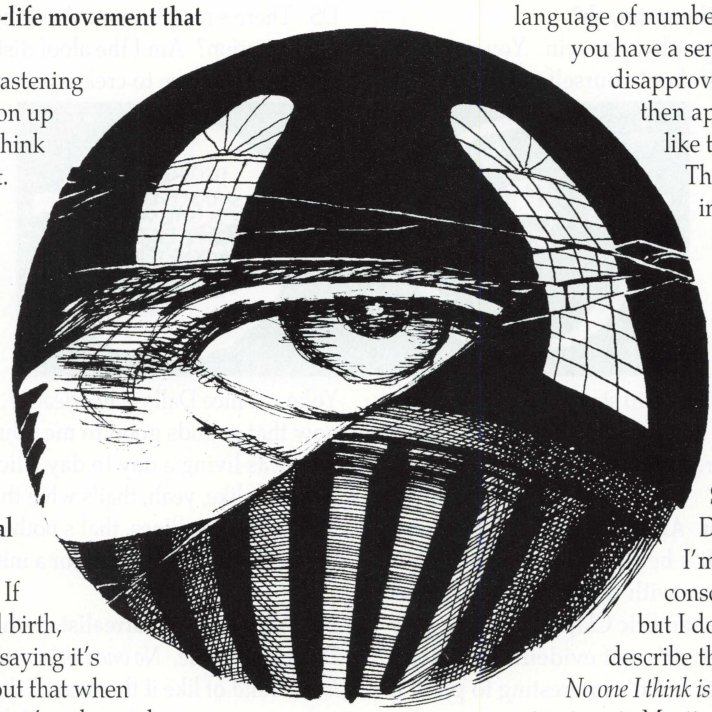
SF: The processes, the vectors.

DS: The forces at work. Now we're obsessing about what are the implications of overpopulation. The only thing that I see being the overwhelming downhill out of control freight train is birth.

Everything else is being wrenched into unrecognizable shape by that. We've gone from 3 billion to 8 billion in pretty short order, and at the rate we're going, we're going to be up to 15 billion by the year 2000.

SF: So that's why you made your villain the advocate of childbirth.
DS: Yes, because the overall point is that we have life out of balance. Out of the most altruistic motives, we have eliminated most causes of death. We've eliminated all but a few small diseases that we're blowing out of all proportion relative to 8 billion people. 75 million people who are going to die of heart disease in the next ten years, that's a drop in the bucket. That just don't cut it. That's what I'm trying to show with *Cirinists*. They're very rarely the front man in the organization, they're the ones who have been pushing this way for generations. World Wide Peace. The ability to keep people alive till they're 120. The ability to impregnate a 68-year old. As real as today's headlines.

SF: A conspiracy, you say. A pro-life movement that is ultimately anti-life?
DS: A pro-life movement that is hastening towards some kind of confrontation up ahead. I don't know what it is. I think death reasserts itself at some point. Whether it's a world wide plague, or a solar flare or a major flooding, all of those signs of the Apocalypse. At some point death is going to have a really good couple of weeks. He's had a lame couple of hundred years, but he's just saving up.



SF: You're distrustful of the desire to control, the technological urge.
DS: I just like to point things out. If you're one of the devotees of child birth, you won't meet me coming along saying it's a bad idea. But I do like to point out that when you go from 3 to 8 billion people, you've changed something fundamental. Let's look at what are the fundamental changes in the last ten years, and I don't think it's automatic teller machines.

SF: But only smart people will see this. We're breeding for stupid people.
DS: Perhaps it's a merciful solution. A planet full of 75 billion people will be great for Bart and Homer Simpson, but it'll be no day at the beach for Dostoevski.

DAY FIVE

SF: Read the charges.
FM: You are a sham, a bamboozler and a mystic.
DS: It's one of the truths, if you just let yourself go on it, you just babble incoherently like a madman. In order to get it all lined up like soldiers in a row has taken me 15 years to think this up. Pick one example. Really all I'm trying to do with *Reads* is to build one example of how my brain works, or how my awareness works. My brain is a fixed organ. What's in there, it does this. It has led me to a point where that fascinates me, in order to stay focussed on it, in order to put it down on paper the way it looks to me, trying to give people a sense of what is that like, I have to keep all gravitational pull away. I can't keep gravitational pull away. It dissipates the energy 45 degrees out of whack. I'm more interested in keep going on on this course. Who knows what's up ahead? I get surprises all the time too.

SF: The mystical levels of awareness Cerebus experiences, does that reflect your own experience?
DS: Sure. All the time. *Allll* the time.

SF: Surely not finding giant talking aardvarks playing chess with you?
DS: No, but that's a good visual allegory for it. Have a shorthand for what it's like to have a dialogue with something else. It's a language of numbers and symbols and letters that you have a sense of being approved of and then disapproved of and then being ignored and then approved of again. It's very much like the audience but on the other side. The other audience. The next mirror image audience up, or whatever, is assessing. You'll have a rum go of it for awhile, stick it out and then everything becomes okay again. But for awhile, you think, this is it, I've really pissed them off this time, they're going to get rid of me.

SF: *They*?
DS: I'm not talking about the CIA, I'm talking about higher universal consciousnesses around us all the time, but I don't have names for them. I can't describe them any more than I can describe *No one I think is in my tree*. That's as close as you're going to get. Mystic doesn't cover it.

SF: And you'd want to avoid the term spiritual.
DS: Yeah, although that's probably closer to it. Both of these terms are pejoratives in a day and age that considers it has a pretty firm grip on reality. I think if you took a spiritual person, a lunatic, an intellectual and a mystic, and through a sort of convergent point that had a clown mask and its pants down round its ankles, it probably would be as close as I could get to it. It's not serious.

SF: [*warmly*] That would have got you burnt at the stake once.
DS: Exactly. And it's always been there. It's not frivolous, but it's not serious. Like it's in-between these things; it's not one scary heavy dude, it's not this guy is just a buffoon. It's somewhere in-between. And everybody interprets that for themselves.

SF: Something that has a different idea of serious from humans, then?

DS: There's that phrase that they used to use advertising movies: *as real as today's headlines!* There's nothing real about today's headlines from the standpoint of what I see reality as. Fantasy and reality are sort of merging and turning upside down inside of each other and everyone's trying to maintain the division.

SF: So you'd say there's an inimical force to obliterate the mystic in people's minds.
DS: I think that there is seminal creativity, there's original way-back-when creativity. I also believe there's an all-encompassing or very much overpowering black hole that recurs throughout all of human history. Corporate America is that with respect to creativity. It takes it in, and it changes it into something else. It doesn't matter how good a book is—it gets absorbed into Hollywood and transformed into something else inferior to the original. If you have any critical streak in you.

SF: The Mark of the Beast?
DS: It's void consciousness. I don't think there's any great malice, it's just in the nature of that Beast to absorb, crush and transform something that has merit and then do a self-assessment and think, well, that was a good thing to do. And that seems to be in the nature of that other force. Positive forces are very doubtful of themselves, they're always looking at their own motivations and trying to do as little damage as possible. I have a story to tell. I just want to put something down on paper the way I see it as opposed to creativity that justifies itself by the number of people that it employs.

SF: A pontine marsh project whose purpose is to prop up the dictatorship, not to build a road that will work.
DS: The original make work scheme, and now we call it job creation. A noble hue that I don't think it has any business attaching to itself. I think it's required to keep the game going. It's not over in my category of nobility.

The shadowy figure clapped his hands. The minions loosed his arms, and David S stood up, a little shaky, but more or less firm. His eyes had adjusted to the light. The shadowy figure seemed to take on a definite shape. A small boy trying to look taller and talk in a deeper voice. Then it flickered, and for a second it seemed to possess the face of David S himself. Then one more change, and there was no shape, only the darkest of all voids, within which, at the deepest point, was perhaps a shard of brilliant light. David S rubbed his eyes.

"Okay, you can go now. Be seeing you."

In a daze, David S found himself in his own bed, again rubbing his eyes.

"Thank God for that," he thought. "It was only a dream."

There was a knock at the door.

"Oh dear. It's going to be a long night." M2

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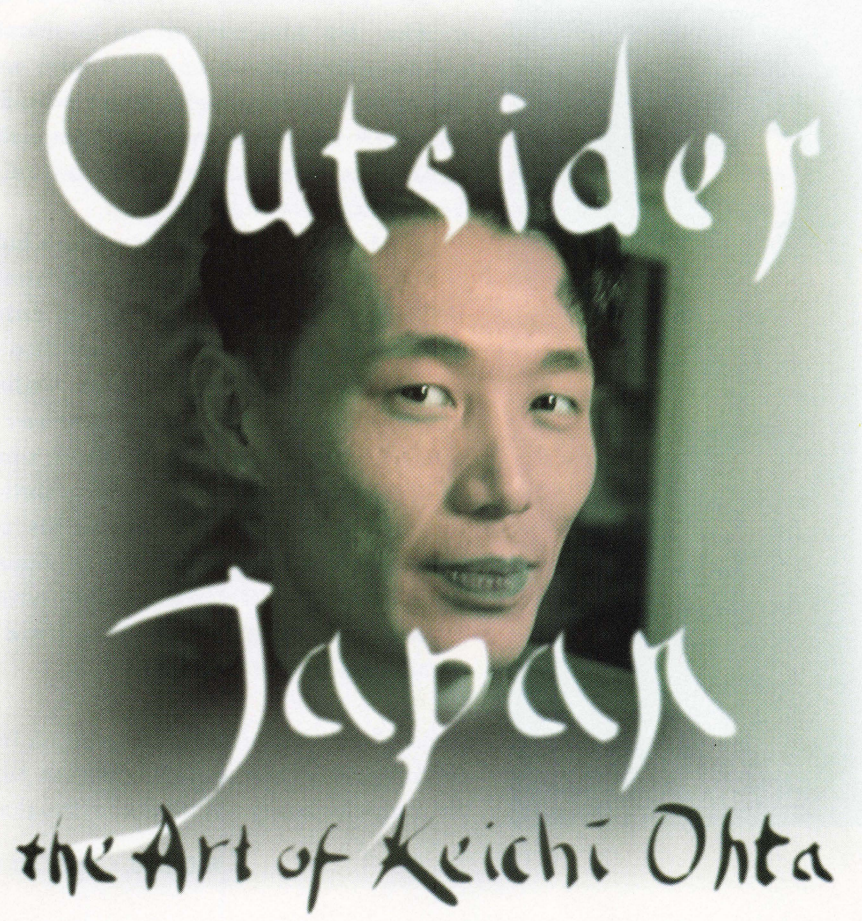


photo of Keichi Ohta by Keisuke Oki

Outsider Japan
the Art of Keichi Ohta

AN APPRECIATION BY STEVEN OKAZAKI

The train pulls into Tokyo station. I feel a gentle tug at my elbow, glance back, see nothing and continue on. I feel it again. I turn around and see a small gray-haired woman in a kimono. She is upset. She shouts something but it's too noisy to make out. A hundred commuters, murmuring their disapproval, adjust and stream around us as the woman points at my shoe. One of my shoelaces is untied. She bows her head slightly, then disappears into the crowd. I stand there staring at my shoe.

The hardest thing to be in Japan is different. If you are disabled in some way, if you are wearing green when everyone else is wearing black, if you are a Hiroshima survivor, if your shoelace is untied, you are different. Japan is a tidy country where everything has its place, and everyone must fit in, somehow.

I know a man in Tokyo. He inhabits his own strange world. He is like a child who has invented a fantasy world to combat the horribleness of real life. Except the child has been so twisted by abuse, he creates a fantasy world full of horrors so that he can control them.

I encountered Keichi Ohta's work in 1985. A friend gave me an illustrated children's story about a man who is burned in a fire and whose blisters mutate into hundreds of small eyes and mouths all over his body. It was both humorous and frightening. A few years later, someone sent me a postcard of a painting depicting a matronly school teacher leading a horde of tiny Japanese schoolboys as they brutally pinched, suckled, raped and tortured a young woman. Later, in a Tokyo bookstore, I found an illustration by Ohta, a startlingly beautiful, near perfect rendering of a moth's wings.

I spent a day with Ohta in his apartment/workspace on the outskirts of Tokyo. He showed me his collection of insects and snakes in formaldehyde bottles, played Chinese jazz records from the 1930's and music by his own group, Guernica. We had a fine lively conversation in which he kept everything from me. Ohta's work reminds me of unspoken fears and obsessions. He explores the lust, madness, cruelty and beauty that lies beneath Japan's facade of tidiness and order. With a sense of humor.

I read a story in the newspaper. A Japanese student was late for school. A crazed teacher, obsessed wtih the student's tardiness, ordered that the iron gates of the school's entrance be closed immediately after the last morning bell, no matter what. He stood by and watched as the late student was crushed by the gate and killed. I wonder if her shoelaces were tied.

◄ **RICE CAKE OF JAPANESE NEW YEAR'S DAY 1985]**

In the mid-80's, before the bubble burst, Tokyo's art and music scene was just exploding with energy and possibilities. I first met Ohta-San through his music. He was part of an informal group of incredibly gifted artists and musicians who were working in Tokyo. There was a wonderful thing called the T.R.A. project that put out wild musical compositions. I heard a song by Ohta on one of them and wanted to use it for a movie. That's how we met in 1986.

That was of course before the bubble burst. That was the great divide. Before the bubble burst and after. Now the art scene has gone safe and commercial—except for a few crazy people like Keichi Ohta.

Keichi Ohta was born on February 20, 1957. He began his professional career in 1980, creating everything from record album covers to movie posters to illustrations for sado-masochistic magazines. And it doesn't stop there. There is his own fine art and two illustrated books available in Japan—*Hataraku Bokura* and *Amnesia*. He also writes lyrics for a band called Guernica. This is the first time his work has been published in the United States.

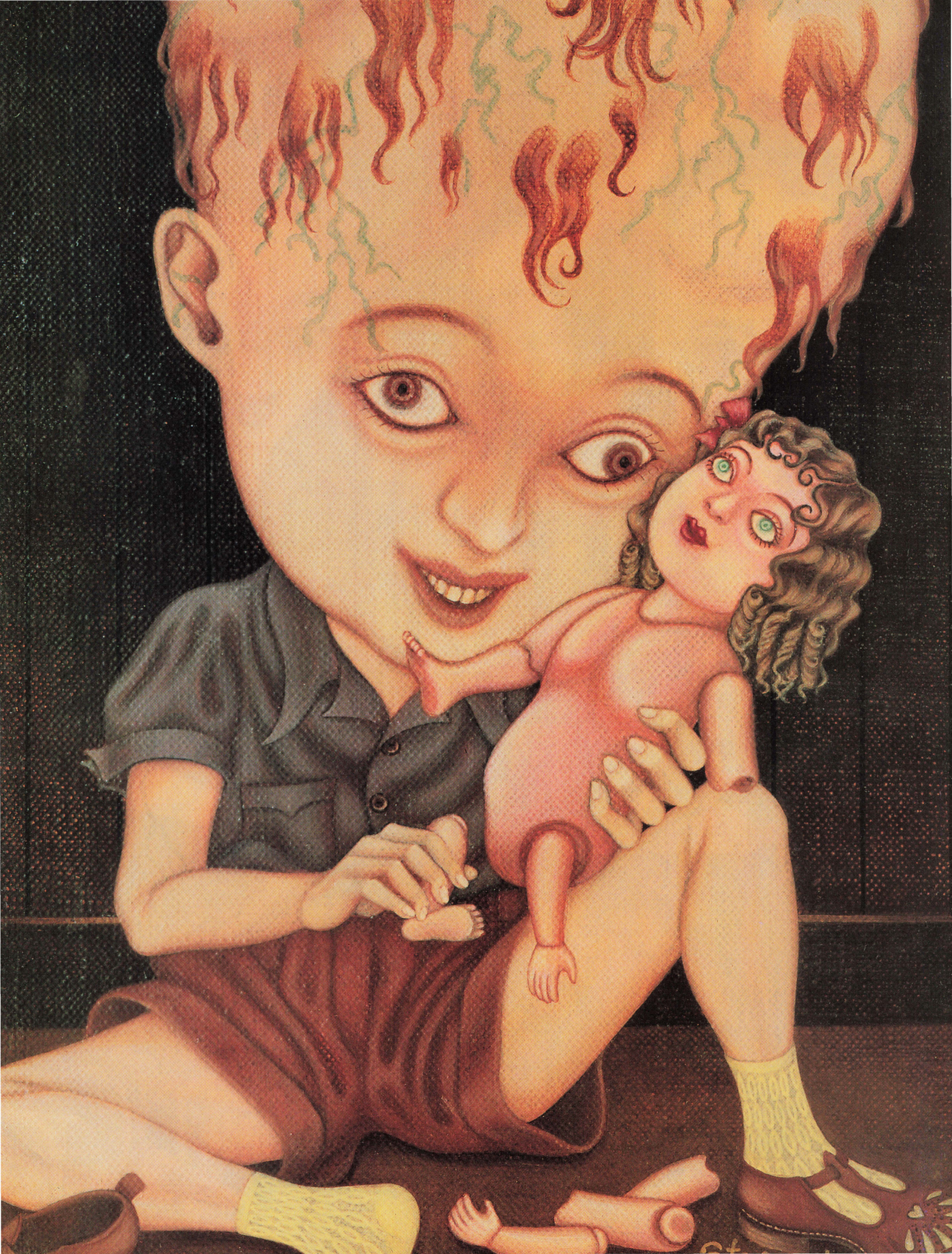
Steven Okazaki directed the cult hit Living on Tokyo Time, *won an Oscar for the documentary* Days of Waiting, *and has just released* The Lisa Theory. *He's currently shooting an HDTV documentary about HIV positive young adults.*

photo of Keichi Ohta by Keisuke Oki

[PLAYING DOLLS 1986 ►

[CAVALRY BATTLE 1993]

[GYRO TOP 1985]



Gta Haiti

[HAMMAM 1989]

◄ WIR JUNGE PIONIERE 1990]

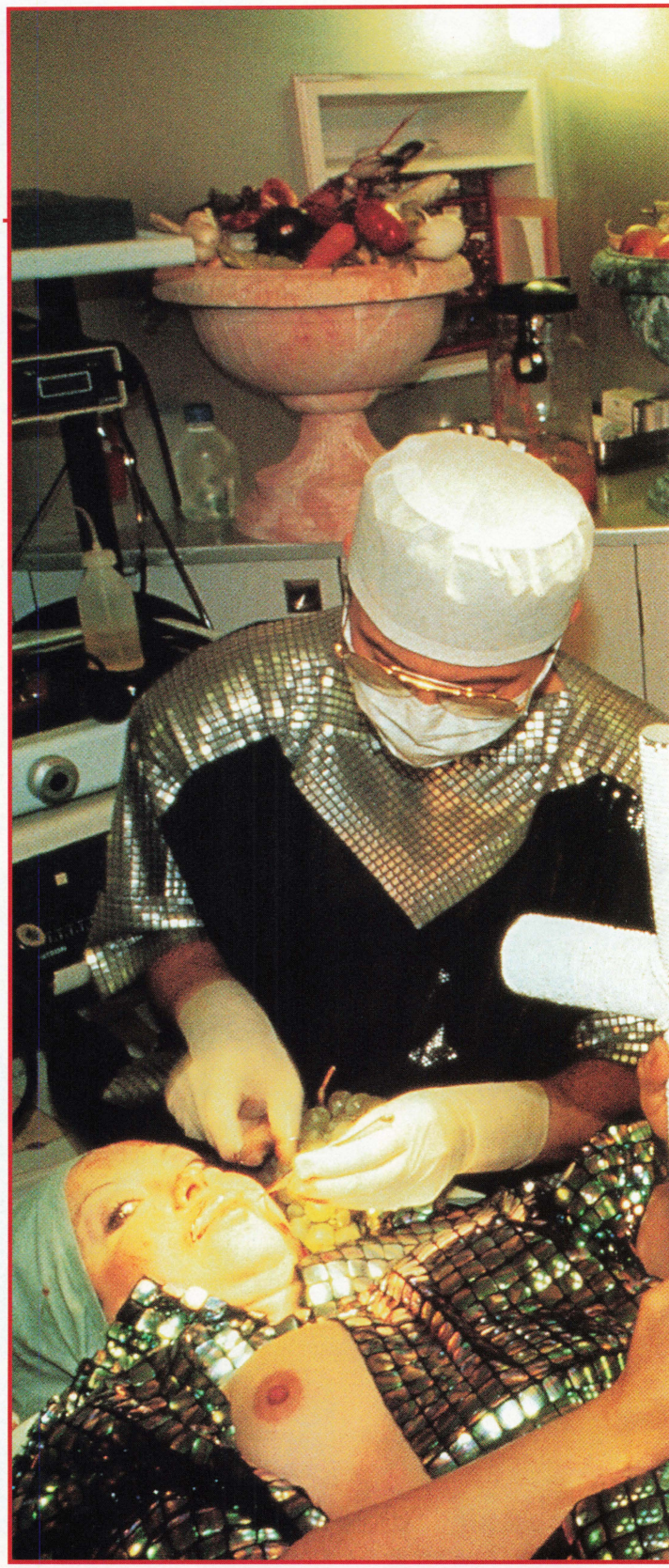
[SEASCAPE 1985]

[MINERAI LE SOIR 1984]

[CD COVER 1991]

THE DOYENNE

"You wonder: Is it art?
You wonder: Is she nuts?"
—Sharon Waxman, *The Washington Post*



Divasection is a popular pastime in our culture. But rarely has the subject opened herself to the phallic gaze as industriously *as Orlan—the diva of dissection, the biomorph queen, a bit-mapped Bride of Frankenstein, a one-woman slasher exploitation film.*

"Intricate, baffling and repulsive," cried the critics. Now there's *a formula. Orlan takes pains to make her audience uncomfortable. As well they should, drawn into mute complicity with this spectacle of sadomasochistic voyeurism tarted up as performance art with the papal stamp of the McLuhan Center and fashions all around by Paco Rabanne.*

While conceding her "rare courage" and merchandising genius (she hawks reliquary vials of her own excess lard, courtesy of liposuction), one has to step back (behind the thronging groupies, angry, perhaps even abused?) and ask: Is this "politically transgressive"? Or is it bogus, contrived, and "deeply sad"?

OF DIVASECTION

BY MIRYAM SAS

PHOTO BY AIAIN DHOME

She protests that she, like Madonna, is "in control." Yet she continues to subjugate herself to the master narrative of art history—making of her face a bit-mapped chimaera of patriarchal heroines: the chin of Botticelli's Venus, the lips of Boucher's Europa, the nose of Gérôme's Psyche, the eyes of Diana, and the forehead of the Mona Lisa. Since 1990, she has completed nine surgical interventions—as theatre. She is most famous for the "omnipresence" hook-up in November '93 from a New York operating room to 14 cities around the globe, from Dijon and Zurich to Tokyo and Toronto.

She concluded her recent baroque ambition tour with a cameo appearance—the pièce-de-résistance *of the* Feminist Atavism and Art *conference at the* Yerba Buena Center. *Called '*The Illustrated Woman,*' Orlan's head in a Bride of Frankenstein wig adorned the program cover. And they flocked to see her. While she discoursed—a well-rehearsed discourse—video rushes of her latest plastic surgery danced above her head. Originally beamed out by satellite to interactive sites all over Europe and North America, it was a regular bit of slice and dice. Not for the squeamish.*

The conference-goers—mostly women—weren't buying. There was the nagging sense that there was something bogus going on—or perhaps merely irrelevant. Irrelevant to those less enmired in the Western Master art tradition and the neurosis of Catholic imprinting. Her work, after all, turns *on blasphemy. And what blasphemies are still left us in late 20th century popomo culture?*

So, is she making of her body a crucible for a discourse on elective mutation?

"We live in an age of body vivasectionists," said Kroker in The Possessed Individual, *"of the reduction of the body to a vast experiment onto which are projected all of the* ressentiment *of our botched and bungled instincts. Designer freaks who make of the text of their flesh a cynical sign of the disappearance of the body." Orlan then as a sign? Is it a liberating practice to remake oneself a new face, a new recombinant body or is th body obsolete, a vestigial relic?*

Orlan—the name has a synthetic ring to it, like teflon or nylon. Artificial—or art official? Durable too—she's been on the scene since the late '60s. Her current mission (whether she knows it or not): To glamorize and usher in a new era of suicidal nihilism and a complete fragmentation of the concept of identity. It was Nietzsche who prophesied that ours would be a time of revenge seeking nihilism—the vast majority passive nihilists, passive onlookers led by the "aesthetic priests" of suicidal nihilism.

For Orlan, the artist, Arthur Kroker asks: Is it possible to work within the "dominant male paradigmatic codes of fetish and voyeurism" and escape the codes, transcend the codes?

And for Orlan, the little girl who had become hard and wanted to be soft and vulnerable again—by colluding with the slasher, being possessed by the slasher—her face has become a waxen Madame Tussaud basilisk mask. She has become a genuine freak, a monstre sacré, *a* prodigue. *As Victor Hugo's depraved aristocratic seducer says in* The Laughing Man:

"Am I a goddess? Amphritrite gave herself to the Cyclops. Am I a fairy? Urgele gave herself to Bugryx, a winged man with eight webbed hands. Am I a princess? Marie Stuart had Rizzio. Three beauties, three monsters... I act like a queen. Who was Thordope but a queen who loved Pteh, a man with a crocodile's head? She erected the third pyramid in his honour. Penthesilea loved the centaur who is now the star called Sagitarrius. And who do you think of Anne of Austria? Mazarin was ugly enough... Now you are not only ugly, but hideous. Ugliness is insignificant, deformity is grand. Ugliness is a devil's grin behind beauty; deformity is akin to sublimity." *—Sharon Grace.*

Photo : by F. Levesque, photoshop manipulation by Hi Dee Ploti

M2: Here—take a look at MONDO.
Orlan: Oh, it's hilarious—great. I think I've seen it before, when I was in Australia—during the Sydney Biennial.

M2: Really?
Orlan: Yes. What does MONDO want to know, exactly?

M2: Give them a bite of techno-art, I don't know, something French and philosophical sounding.
Orlan: I think in talking about those issues I would emphasize the concept of OmniPresence that I invented for my plastic surgery in New York November 21, 1993. I used satellite to project my performance from the operating room into 14 different locations, including the McLuhan Center in Toronto and the Centre Georges Pompidou. I interacted directly by televideo with the critics and philosophers who were watching the performance while the operation was going on, and people could fax questions to the operating room from all the different locations. It was a strange image for them, it was just like watching a body being autopsied while the words continued alongside.

A lot of critics just talk about my work in terms of the legacy of the Body Art of the sixties. They're nostalgic for that, and they don't think about the technological aspect.

M2: You could also tell them about your work with computers, satellites, holograms, virtual reality…
Orlan: This journal is really well presented and put together. I'd like to be in it… but I really am so tired. All these interviews really wear me out. You know, I have to talk and talk and I feel like a tape recorder, it leaves me completely emptied out.

M2: We should develop a system for all the people who always ask the same things, where you can just say "Response #3" and I can translate what I've already heard, so you don't have to say it again.
Orlan: That would be a good idea.

MY DINNER WITH THE DIVA

M2: You know how we got in? I told them you were a famous star from France and that we were in a huge rush… so they gave us this view of the bay without a reservation.
Orlan: It works—once in awhile. In Dijon, I went to the Galleries Lafayette one time to buy deodorant and the woman recognized me, she gave me a huge pack of complimentary cosmetics *this big*. You know, little bottles of cream, perfumes… Connie Chung interviewed me over the course of three or four months. In the show, I got to say two sentences. Before the operation, she asked me what I had eaten, and I said cheesecake. That was very useful to me this evening. I was brought cheesecake before coming on stage. TV can be a bit useful sometimes.

M2: But you didn't like the show they did.
Orlan: It's not a big deal… [*A bit later, over mussels, baby greens, and Merlot*] You know, I did a lot of shows with lasers projected on buildings, I've made holograms—and I made an online Contemporary Art Magazine through the *Minitel* —it wasn't an information magazine, it was a place where artists could talk about the problems of resolution.

M2: You also bring psychoanalytic texts into the operating room…
Orlan: I did an operation (my fifth) which was based on a text by Michel Serres. It's a very good metaphor for my performance. I can give you the text in English, if you want, the preface to a book of his called "*Tiers Instruit.*" It's not his best, but the first thirteen pages are really fantastic. It talks about the tattooed figure of the harlequin, hermaphrodite, and about how science has finally stopped mentioning the word life in the laboratories.

"What can the common monster, tattooed, ambidextrous, hermaphrodite and cross-bred, show to us right now under his skin? Yes, blood and flesh. Science talks of organs, functions, cells and molecules, to acknowledge that it is high time that one stopped talking of life in the laboratory. But science never utters the word flesh."—Michel Serres, *Tiers-Instruit.*

THEATRE OF CRUELTY

M2: Do you work from de Sade?
Orlan: I don't feel any influence, myself. For my fifth operation, the one performed on my mouth, I projected the video four times onto the ceiling with the words of Christ before the Passion in the center: "In a little while you will no longer see me, and in a little while you will see me." I used the ceiling because the spectators would be obliged to feel uncomfortable while watching a body in discomfort. What I do is I bring out things that are mysterious in the operating room. A thing that would be interesting to do would be to have a show of abjection, of forbidden images.

In galleries and museums, they show things that are very clean, very safe. Apartment decorations. For apartments, you already have plants and fish-tanks. I'd rather make art that makes you uncomfortable, that asks questions. When these images are decontextualized and

Photo by Jacobson

turned into a spectacle, I find them hard to look at too. What's interesting to me is that these images, rather than passing through your eyes into your head and into your unconscious etc., it sees to me your eyes become black holes, and the images come into those holes down into the body where it hurts.

I also use a lot of Artaud, because I'm interested in the concept that the body is obsolete. There's that famous passage when he says that you shit so many times in your life, you pee so many times, you sleep and pick your teeth so many times, and a for all that a poet might only produce fifty pages of poetry. It's very famous. Michel Onfray, the philosopher, sent me a fax in the operating room that said, "Orlan, when your body will have become a cabinet of curiosities, a collection of citations, an anthology of references, and a cultural protest against the overflowing of nature, you will find your place among the shadows and the phantoms of the excessively singular rebels."

"If it were a matter of shaping the body by having recourse to diets, exercise, or products furnished by a society anxious to submit the individual to the market and to the tyrranny of its canons, there would be sycophants ready to legitimate this variation on the theme of sculpting oneself.

If it were a matter of pushing this logic even further and affirming the imperious will of desire over the identity and over the body itself, though, then the ethics police will awaken to insert morality between the project and the gesture. And they would misuse morality to stigmatize your project which does not happen to have found the right moment to be politically correct. Fortunately."—Michel Onfray, *The Aesthetic of Surgery*

M2: Do you enjoy your body physically? I mean, how does physical pleasure fit in?

Orlan: I could tell you what all the papers say, which is that I have a lot of pleasure with a very young man who wanted me very badly. He's twenty four years old and we fuck all the time. Before that I had many lovers—old men, young men, old women, young women, rachitics, fat men, fat woment, all different body types. My only problem is that I work too much, and I travel too much—it's really bad for my libido. But since I'm in San Francisco, maybe things will work out better.

IDENTITY PARADE

M2: The idea for of your work started out as a compilation of identities. At times you have called yourself a transsexual from woman to woman—what do you say when people ask why there are no women artists in your computer self-portrait?

Orlan: I just say, "I'm a woman artist. Isn't that enough?" Before I came up with my computer composite psychological self-portrait which I worked with during all my nine operations, I very nearly based my whole work on one painting in the Louvre by a woman artist, the wife of a famous painter named LeBrun. It's a self-portrait of mother and child, which shows so much tenderness and vulnerability, and at the same time it is a painting with incredible presence. But I realized quickly that to try to recreate that image directly would be like trying to become Brigitte Bardot, or someone like that...

M2: So you switched to the composite of bits from Boucher, da Vinci, Botticelli, and the others...

Orlan: As a girl, I was very shy and I needed to create a mask toward the world that would be aggressive, forceful, I wanted to become a kind of *super-nana* [*a mega-fox—eds.*]. But now, after 20 years of working with that image and moving towards a final recreation of my identity, when I will take a new name, a new passport, and my new face on the picture, I feel more and more that I don't need that aggressive, hard mask anymore. It's not really useful to me now. I am ready to move toward that vulnerability and timidity you see in the LeBrun portrait in the Louvre.

SKIN DIVA

M2: But it wouldn't have worked to start out there...

Orlan: There's a chapter about me in *La Robe* by Eugenie Lemoine-Luccioni, the Lacanian psychoanalyst, and another part of that book I read during each of my operations.

M2: You read from another chapter, not the part about you.

Orlan: Right—it's from a part called 'The Second Skin." She writes that the skin is deceptive, that in life one has nothing but one's skin—I've told you this before, haven't you heard this before?

"Skin is deceptive... because having and being do not coincide, and because this having is the reason for the misunderstandings in all human relationships: I have an angel's skin but I am a jackal; the skin of a crocodile but I am a puppy; black skin but I am white; the skin of a woman but I am a man. I never have the skin of what I am. There is no exception to this rule because I never am what I have."—Eugénie Lemoine-Luccioni, *La Robe.*

Orlan: And I thought that now, with new technology, one could try to reveal what one was in the interior. Although of course it is only an attempt, an experiment.

M2: So you respect that idea of the separation between interior and exterior?

Photo by Robert Paglieri

Orlan: Well, I think that most people feel a very strong sense of estrangement from themselves because of that. I thought that with surgery, I wanted as much as possible to try to bring the exterior image back into relation with the interior image... It's a problem of communications, if you like. For example a transsexual, a man who feels himself a woman, wants the world to see a woman. It's so recent that women have begun to appropriate their bodies, and I want to use new technology to radicalize that [self-]appropriation for my own case. I'm not saying it's for everyone to use it in that way.

M2: That must have affected your identity as an artist...
Orlan: It's very complicated. It changed a lot, this performance, but... that comes from the experience of the performance, everything which was happening around it, not just...

M2: ...the physical transformation.
Orlan: It's my whole life that is changed. Originally the idea was to make a new image to create new images. In a way, it's like the Hindu goddesses who change body and faces to have new adventures and do new work. [*changing the subject*] Aren't you going to drink this? [*my untouched glass of wine*]

DEATH AND THE MAIDEN

M2: You said you wanted to do your next operation in Japan...
Orlan: I want to do a nose enlargement, and they know how to do that there. Here and in Europe, there is a tendency to sensationalize my work and to consume it very quickly. My impression of Japan is that although Tokyo is very fast paced, there is a higher tolerance for images of suffering and death—people look at them longer and have a different way of absorbing and processing those images.

I have articles about me written in Japanese. Maybe you can look at them and tell me what they said about me, if they were stupid, or what.

M2: You can send them to me...
Orlan: By fax. I never write letters, it's way too much trouble. If you want to communicate with friends, it's too expensive by telephone... Didn't you order a main dish? Why aren't you eating a main dish? You are going to be hungry.

M2: No, it's fine.
Orlan: Why don't you order dessert? Don't we have time?

M2: Not really.
Orlan: This wine is really good. [*California Merlot*] It's really good. You should drink something.

M2: You can finish mine if you want.
Orlan: I'm sorry I'm so tired. It hurts, you know. My mouth hurts when I talk, and when I eat. I slept very badly last night, and I'm really tired. The telephone was ringing all night long.

Usually someone who travels and runs around to a lot of appearances and interviews has a lot of money—she can get massages, she has the means for whatever she wants...

M2: She has a chauffeur...
Orlan: She takes the Concorde and it's only three hours from New York to Paris. I do the same amount of work but with nothing. In San Francisco I had a very good welcome, I was very well taken care of, but it's very unusual. Because I don't earn anything and I spend so much—I don't know how to fix that.

Everyone wants something from me, everyone eats me, and they don't give me anything. In Europe it's different because they pay for interviews, and I can make enough to live. Even so I am on the point of losing my studio in Paris. It's completely ridiculous, you see.

I don't know how to solve the problem. Either I just stop everything, say no to everyone... but it's complicated because I get responses to the things I have already put in place. I need to face the situation... For example, I was supposed to get an operation... [*the waiter brings the check*] No, I'm going to pay. No, don't, I'm paying... It's really bizarre, my life. [*She opens the yuppie fortune-cards the waiter gives us on top of the bill*]. What does this say?

M2: "I avoid temptation, unless I can't resist it."
Orlan: That's funny, after what I just said.

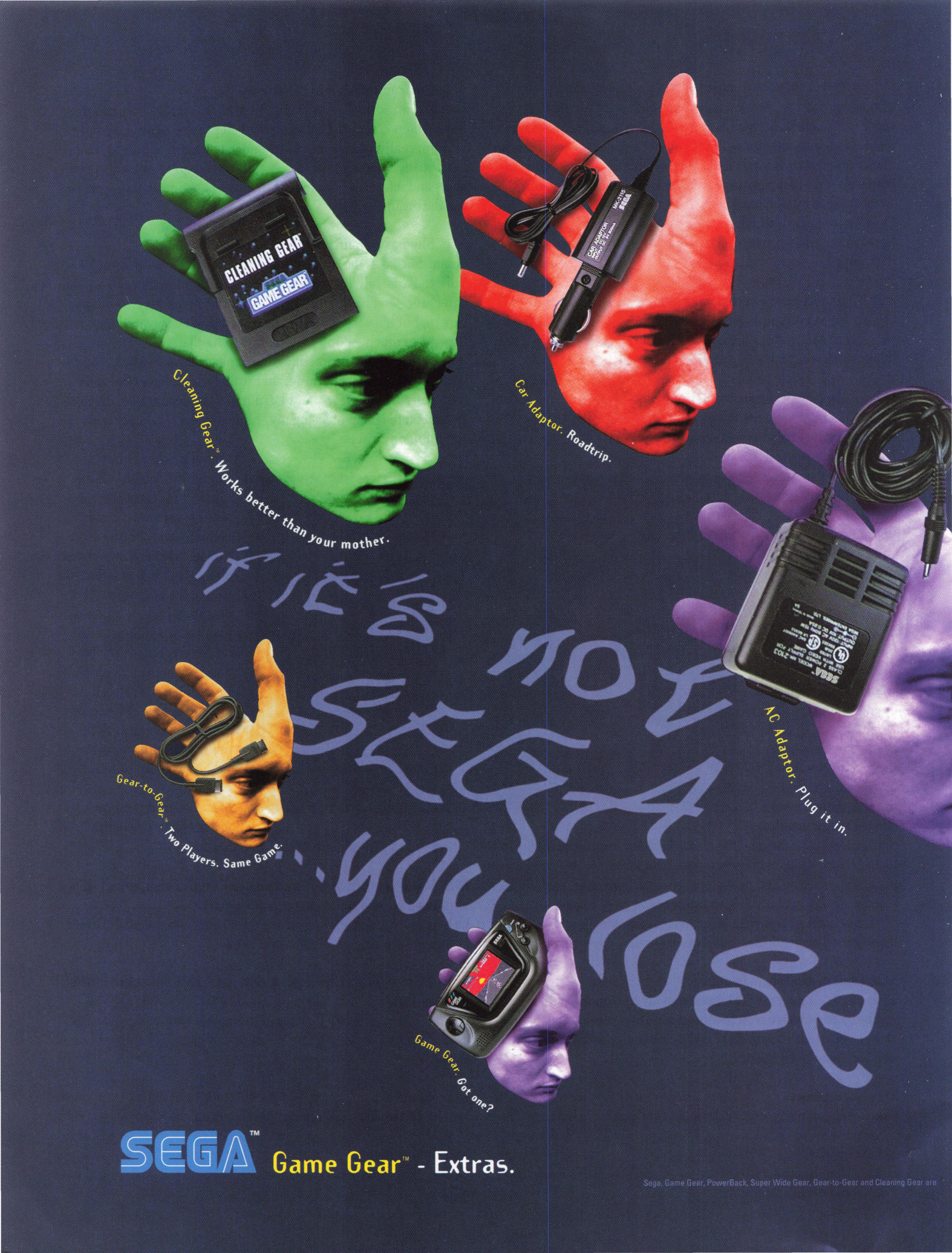
M2: Mine says, "Everything you see I owe to spaghetti." It's supposed to be a quote from Sophia Loren.
Orlan: How much should I leave for a tip? Two dollars? Three? Is this the big bridge of San Francisco?

M2: This is the Bay Bridge. You're probably thinking of the Golden Gate.
Orlan: I'm so sleepy. [*looking at a homeless man on the sidewalk as we rush back to the car*] He's getting a suntan. That man over there.

M2: What?
Orlan: In the sun. He's lying there, getting a tan.

M2: I guess so.
Orlan: [*wistfully*] He's really lucky.
M2

Photo by Alain Dhome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PUTTIN' ON THE TITZ

an Entr'acte with

KATE BORNSTEIN

I'm walking down 16th Street minding my own business. This good looking woman is coming toward me. She's got on baggy unbuttoned overalls and an orange tank top. Her arms look good, her shoulders look good, and what I can see of her stomach looks good. Two guys are standing on the sidewalk. As she passes them, one says to the other, "I'd like to take that one home." The other guy agrees. The woman keeps walking. Now it's my turn to pass 'em. "I'd like to take that one home and knock her around a little bit," the first guy says. I keep walking. The other guy answers. "That's a her?"

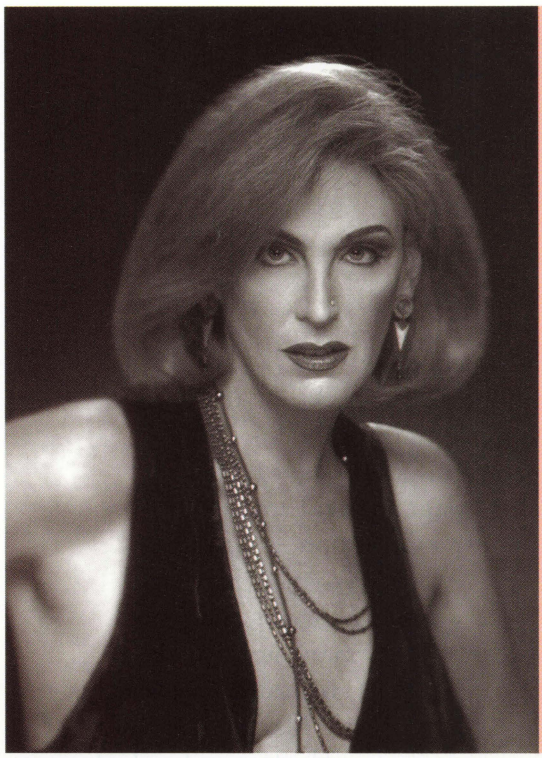
BY TRISH THOMAS

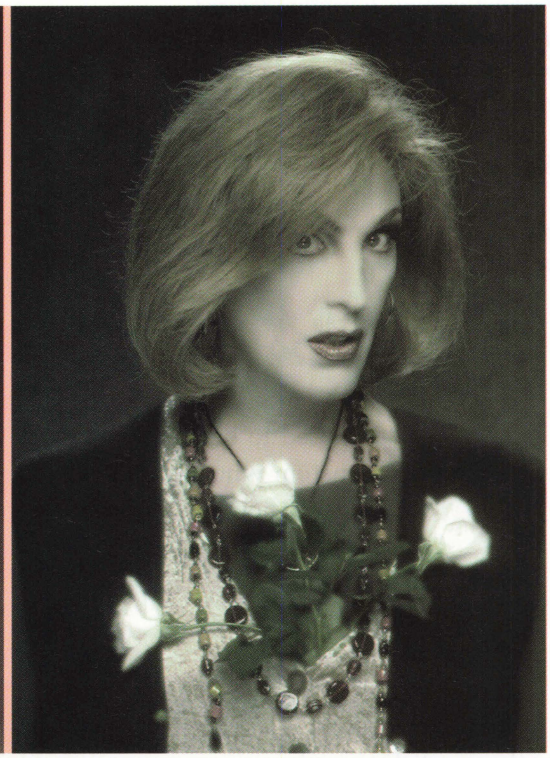
But enough about me. This is supposed to be about Kate Bornstein who wants you to read her new book *Gender Outlaw*. Bornstein used to be a man; now she's not. Bornstein used to be a heterosexual; now she isn't. Bornstein used to have a dick; now she doesn't. Φ She's a "used-to-be-a-man, three husbands, father, first mate on an ocean-going yacht, minister, high-powered IBM sales type, Pierre Cardin three-piece suitor, bar-mitzvah'd, circumcised yuppie from the East Coast... a used-to-be politically correct, wanna-be butch, dyke phone sex hostess, smooth talking, telemarketing, love slave, art slut, pagan Tarot reader, maybe soon a grandmother, crystal palming, incense burning, not man, not always a woman, fast becoming a Marxist." Φ All that's not what makes her an outlaw. What makes her an outlaw is she sees a time when folks will look at the binary gender system and throw back their heads and laugh—ha ha ha. Males and females and that's it? Ha ha ha. Get the fuck outta here.

PHOTOS BY BART Φ NAGEL

Bornstein's looking forward to us all living in what author Marjorie Garber *(Vested Interests*, Routledge) calls the Third Space. "This whole concept of three is so beautiful," Kate says, "because it includes the first two. I don't say there's a third space that exists *between* men and women. I say there's a third space *outside* of the Binary which leaves the Binary as this construct off to the side, very fragile and apt to fall apart."

If I were a man, everything about me that brings me grief in the world—the way I walk, the way I talk, the way I think, the way I stand, the way I sit, the way I dress, the way I cut my hair, how much I weigh, how much weight I lift—would not only be acceptable, it would be revered. If we lived in the Third Space, it wouldn't even matter.





Bornstein had to learn a lot of rules in order to fit in. Like when a man walks down the street he looks people in the eye; when a woman walks down the street she looks at the ground. And women talk different. They have higher, breathier voices and their speech is more modulated. In mixed conversations, it's the woman's job to laugh at the bad jokes and fill in the awkward silences. They smile constantly while they're talking and use tag questions to qualify sentences, like "you know what I mean?"

"All of these customs are forms of self-deprecation," says Bornstein, "like learning how to keep my knees together and not putting my arm across the back of my seat in the subway train. A lot of that was not so much to *be* a woman as to *pass* as a woman, so that I wouldn't call attention to myself."

If we lived in the Third Space, she wouldn't have had to worry. In fact, if we lived in the Third Space, she might not even have had penile conversion surgery.

"I don't do well with might-have-beens," she says. "I resent that I was manipulated into that surgery by every signpost in the culture. I was not aware of other possibilities at the time. I was a total subscriber to the Binary and to the genitals by which it stands.

"I knew I wasn't BOY, I knew I wasn't MAN. Neither of those categories fit for me. It didn't feel right, I have no idea why. I tried for thirty some odd years and it didn't work. The only other option I saw in the culture was GIRL, or WOMAN. Nowhere did I see that it was okay to be a "real woman"—which I believed in—with a penis! So the next step was get rid of the penis. This insistence on the Binary and the genital imperative that signals the Binary coerced me into that. If I knew everything that I know now, would I do it again? Yes. Absolutely yes, because sex is so much more fun now."

Back to this idea of the Third Space, how do we get there?

"Cyberspace would be a doorway into the Third Space," according to Bornstein. "Cyber--space frees us up from the restrictions placed on identity by our bodies. It allows us to explore more kinds of relationships.

"I can go online as anything. I go online as various kinds of women. I've gone online as a guy a couple of times; I'm playing a stable boy in a vampire scenario now. I've gone online as different monsters. I've gone online as Mr. Spock in a 'Star Trek' scenario.

"Cross-gender identity surfing online is so telling: Men slum and women step into the trappings of power as men. You talk to a man after he's been a woman online and he'll usually laugh and describe some kind of sex he had, usually lesbian sex. But you talk to a woman who's been surfing as a man, there's this spark there. There's this wonder. There's this—'They really *do* have this power!' As soon as men cop to the idea that women are learning this, they're gonna be more frightened."

Cross-gender identity surfing online is so telling: Men slum and women step into the trappings of power

Bingo.

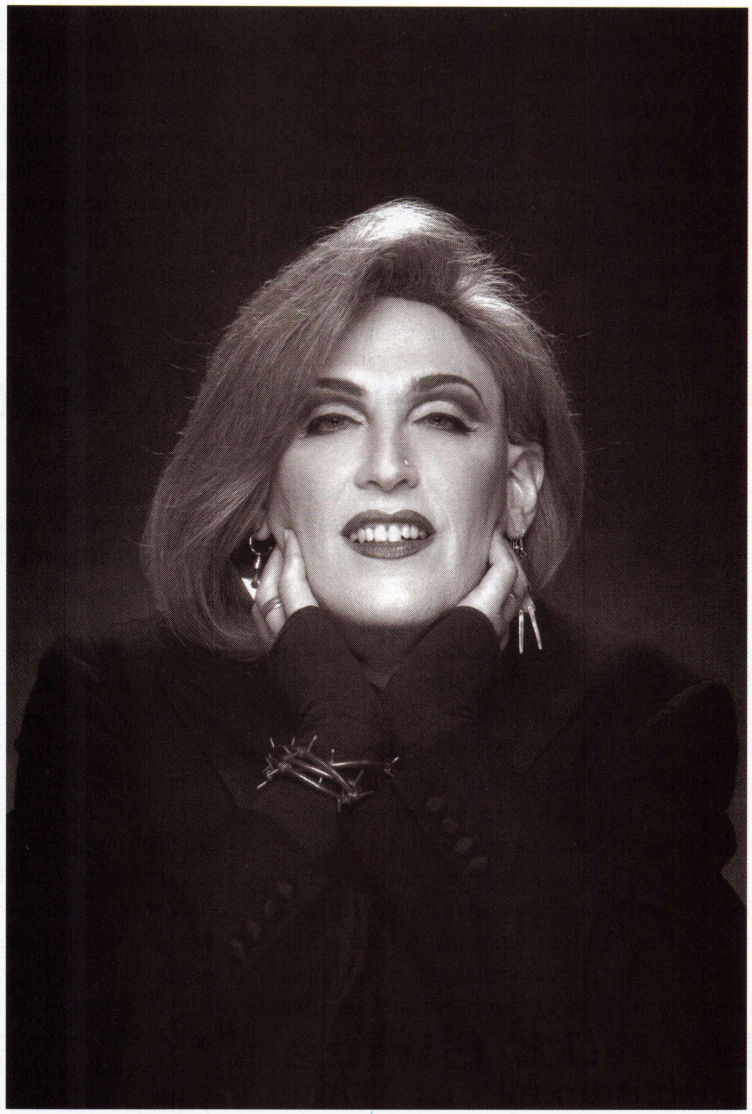
In *Gender Outlaw*, Bornstein asks: "If wealth and power are important, and if in this world wealth and power belong to men, then why did I cease being a man and give up that wealth and power?"

Some male-to-female transsexuals argue—often in response to being excluded from women-born-women only clubs—that they didn't have a *real* male experience because they were never *real males*. Bornstein's not buying it. "I had a bona fide male experience—of course I did. I've been bar-mitzvah'd. I hated it. Being male and hating it sets up a fugue experience. It's definitely a form of madness. I think one way of dealing with the madness is to say it never really happened. That's a legitimate way of dealing with it, but the fact of the matter is, I spent over thirty years of my life as a man or boy. I did not like it. I hated it. I drank a lot. I did a lot of drugs. I played a lot of arcade games."

Once you've altered your gender, it's gotta seem like anything's possible. The whole world must open up. Does that mean that transgender stuff is the final frontier? Bornstein doesn't think so.

She believes that once people get a grip on the idea of the Third Space, and transgender stuff becomes passé, we're probably gonna have to look at other binary divisions. "What are the differences between animals and humans? What are the differences between plants and animals? What about artificial intelligence, androids like Data from "Star Trek?" They're gonna be around. I think the gender binary is the one most firmly entrenched in our culture simply because it's the one that capitalism trades on the most, other than class. We haven't confronted class. A minor communist uprising in Eastern Europe is *not* dealing with class. Certainly, the United States has never dealt with class. I think the fact that my book actually got published by a respectable publisher is an indicator that the culture is ready to chew on gender, whereas I don't think the American culture is as ready to chew on class.

"I'd say gender is the last *apparent* frontier. It's the frontier that's just become illuminated. It's titillating. In public relations terms it's sexy. In *sex* terms it's sexy. It's a movement, a real live movement—ready or not, here we come!"



Meanwhile, back on 16th Street.

I take a few more steps, then my brain turns over and I say to myself, "Fuck this shit."

I stop, turn around, walk back, and stand in front of the first guy. "You say something to me?"

He's shocked. He starts stuttering and shaking his head.

"Uh... uh... no... I was just... I mean... he was just... I mean... he wanted to know—"

I interrupt him.

"Something about knocking somebody around?"

He starts stuttering again.

"Uh... no... uh, I was just... I mean, he just... I mean, I was just saying—"

I interrupt him again.

"You know what it sounded like you said? It sounded like you said you wanted to suck my dick."

"Uh... uh... your dick?" He looks at my crotch to see if I have one.

(I do, but it's back at my apartment.)

"Yeah," I say, "that's what it sounded like you said. I think you want to suck my dick, don't you?"

He looks at my crotch again, then he looks back at my face. He grins, still stuttering.

"Uh... well... I, I, I... I wouldn't mind."

"That's what I thought," I say, and walk away.

I was a total subscriber to the Binary and to the genitals by which it stands

For an almost complete collection of Bornsteiniana, start with *Gender Outlaw* (Routledge), go directly to *The Last Sex*, Arthur and Mary-Louise Kroker (St. Martins Press), and keep an eye out for performances of *Hidden: A Gender* and *Virtually Yours*. The unsatisfied can obsessively watch for guest appearances on *Geraldo*.

Trish Thomas is at work on a pornographic action adventure fairy tale called Boy Crazy. M2

IMAGOLOGIES: Media Philosophy (Routledge), *by Mark C. Taylor & Esa Saarinen* [A Book Review]

Meretrix/Mediatrix

by R.U. Sirius
illustration by Eric White

Now ISN'T THAT *SPECIAL*? Indeed, if philosophers were stars in America, as Esa Saarinen apparently *is* in Finland, Mark C. Taylor might be skewered by SNL's Church Lady for giving preciousness a bad name. Biting off big chunks of Marshall McLuhan, Baudrillard, Warhol, Foucault, Virilio, etc., this book attempts to make the frequently garbled postmodern discourse about media a little bit less abstract and a little bit more accessible.

Ultimately, they fail, even in that derivative act of popularizing, largely because the style is *so* cloying. And derivative is what it is. The only thing that Taylor and Saarinen add to what we've already learned from the McLuhan/Baudrillard school of life in the simulacrum is a contemplation of the nature of the net. Of course, this sort of update has its place. And let me take a moment out from dis-ing this attempt, to confess that I actually *bought* this book and acknowledge that it contains a healthy handful of nice riffs. Had they subtitled the book "Notes for the Media Age" or "Bits of Media Philosophy" one might be more forgiving, or even appreciative. But the book's subtitle announces itself as MEDIA PHILOSOPHY. In other words, these post-academic academics are claiming to be laying out the big Kahuna, but when you get to the bottom and go back to the top of the slide, you'll ask yourself "So what?"

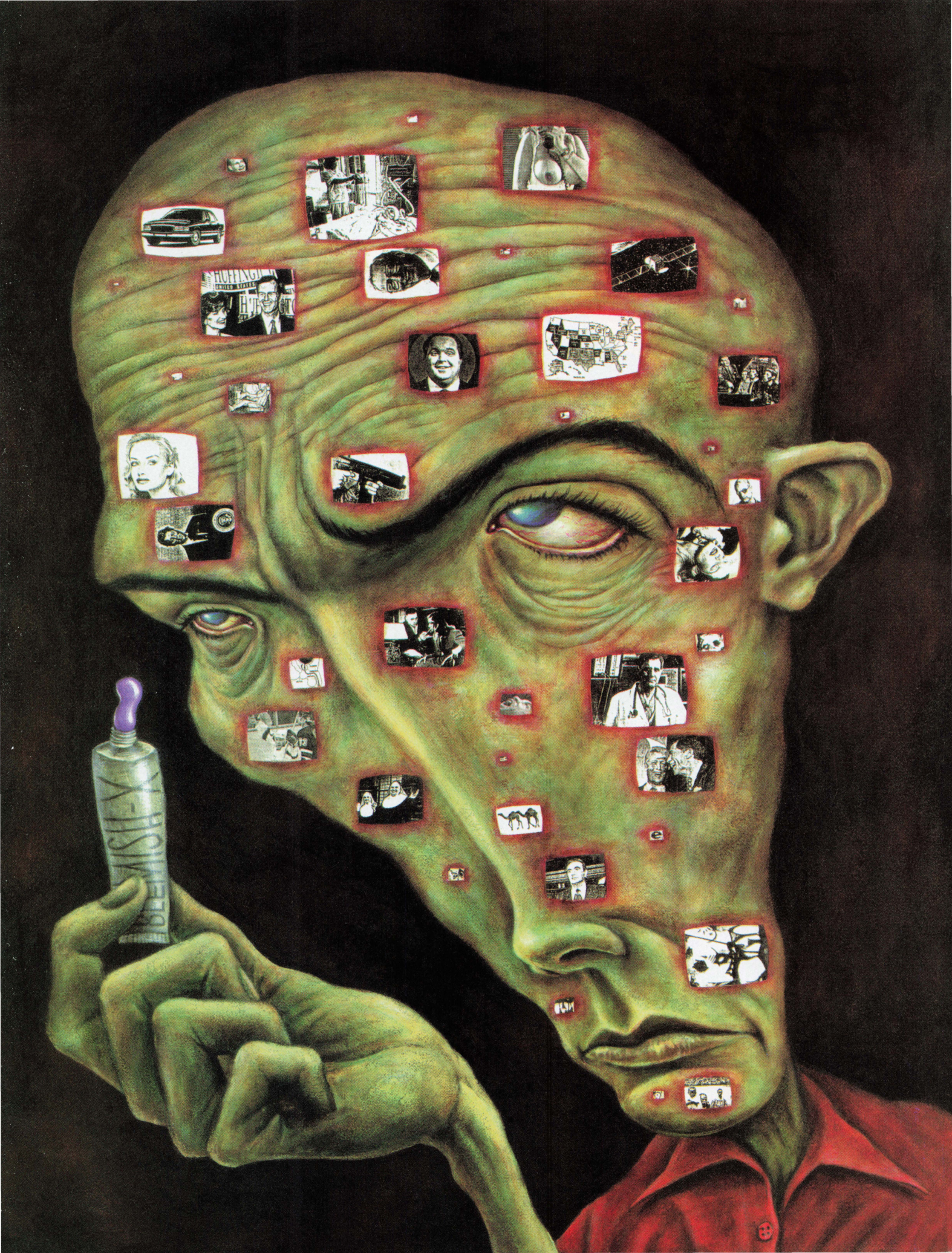
A good deal of air is expelled in this book advocating the validity of making media philosophy and griping about resistance to this in the halls of academia. Boys, boys... YO!!! SNAP OUT OF IT!!! IT'S 1994!!! There is *only* media philosophy and anti-media philosophy. The academies are closing down because the on-line quants have sucked all the money out of the system—the medium is *indeed* the message, guys, and publish or perish means something different out here than it does in there... but you'll learn that soon enough.

Part of the problem with *IMAGOLOGIES: Media Philosophy* may be that it was written in 1992. Two short years ago, it was at least *conceivable* to write about the relationship of the hip, the young, and the pop to media without accentuating the negative, without contending with anti-media as the overwhelming trend. In the shadow of such great spectacles as the fall of Michael Jackson and the O. J. Simpson drama, the extraordinary negative media space occupied by Bill Clinton (and on the heels of such a positive media candidacy), and the elevation of anti-hype aesthetics among young hipsters to new levels of fanaticism (see the reaction to Beck and *thankfully* Woodstock 2), this Media Philosophy misses the boat first of all by not taking on and taking in the anti-media as an element of their philosophy. Sure, there are a few references and lite expositions on Debord's society of the spectacle and Virilio's aesthetics of disappearance. There's even a very brief but effective discussion about how media rejectionists in Germany's Green Party not only destroyed the promise of their political movement but the very *life* of its leader, Petra Kelly, who was guilty of the crime of charisma. This might have led towards a complex excursus into the simultaneously reactionary and revolutionary impulses that are implicit in both anti-media and media activism, but instead we skip lightly onward, sound-byting virtuality, virtual sex, televangelism, virtual war, virtual money (some nice riffs there, actually), etc.

Perhaps I ought be the last person to bash sound-byte philosophizing, and I'm not telling MONDO readers not to read this book, or that they won't find tasty little nuggets of pomo brain candy every few pages. What bums me out about *IMAGOLOGIES*, aside from the inexplicably cloying voice of the writers, are the missing points and missed opportunities. There's no discussion about media's ambiguous role in simultaneously mitigating and increasing the marginalizing effects of cybernetic-based economics (think of the extraordinary influence and power of ghetto-based hip hop culture and then think—at the same time—about how many authentic ghetto voices you bump into online) and—relatedly—no acknowledgment of the extraordinary rise of decentralized media, zine culture, underground boards, cassette culture, independent music and video, etc. Like so many academics, they look no further than Madonna and Letterman. Hip and successful media icons such as these make intriguing (if stale) fodder for contemplating the media zeitgeist, but the mainstream is no longer the end-all or be-all for an astute up-to-date media philosophy. In fact, the decentralizing and participatory attitude of subculture-oriented twenty-somethings ought be considered as the soft "edge" where the new media zeitgeist is located... or dislocated... or dispersed perhaps (but now I myself wax precious so...).

That Taylor and Saarinen are behind the curve while wanting to be right on the razor's edge might be partly blamed on their position as academics and theorists. Theory is the opiate of the academic class (and of the failed revolutionist) and where once we had theory and *practice*, we now have only theory and more theory. The practical part of this book, a university course taught simultaneously by the two authors in Finland and the U.S. using a satellite hookup and online exchanges between the participants is fine, as far as it goes, but it's certainly not a vantage point from which to declaim on the absolute experimental edge of media-saturated culture. But blaming the author's positions as academics for the shortcomings of this book doesn't suffice. After all, Avital Ronnell, Arthur Kroker, Paul Virilio—academics all—exude perversity and, with it, novelty. While Taylor and Saarinen attempt to make a beeline for the absolute center of postmodern discourse, and in trying to define a total media philosophy for the nineties come off as pretentious and unoriginal, these other academics are oft-times indecipherable but original to a fault. When you finally get to what a Kroker or a Virilio is saying, you probably have an insight that you haven't had before. With *IMAGOLOGIES*, fellow mondoids, you most likely have thought of it all before, but you've *also* thought past it.

So, Mark, Esa—when you're riding that white Ford Bronco of hard apocalyptic reality down the disinformation highway of smoking mirrors, don't tailgate—*floor it*. M2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GNARLY GLIMPSES of OLD JAPAN

BY CHRIS HUDAK

COSMOLOGY OF KYOTO:
Tales of the Heian Millennium
(Yano Electric Co., Ltd.)

Wandering naked and penniless on the wind-scoured plain, I come across the cold, shriveled corpse of some unlucky traveler, his shrunken face a withered rictus of some untold agony, his clothes befouled, his meager bag of traveling money beside him, useless. (Who knows his story? Who knows what Fate befell him? Who knows what demons haunted him in the darkness? Who cares?) *Tough luck, tomedachi,* I think, and strip the guy bare. After all, I've got haunted places to go, famous personalities of myth and legend to meet, facts and locales to cross-reference, and a number of other-worldly punishments to undergo in the bizarro Japanese afterlife, and I'll be damned if I'm going to enter the mystery-shrouded Kyoto of a thousand years ago with my *ushirono* hanging out in the wind.

Here's one that won't be on Super Nintendo real soon.

When I saw the first beta of this thing at the Yano booth two MacWorlds ago, I was excited; after several issues of reviewing nothing but fairly straightforward games, here, at last, was something *really* incomprehensible: Literature, society and religion, in fact and cultural myth. Transgression, Purification and Redemption. Death and Rebirth. And *history*—the very dust and song of the ages.

(And all *you* wanted to do was zap some Samurai and laugh at badly-translated Japlish. Well, that's occurring a joyful joke on YOU, honorable round-eye!)

Sorry; sorry. It's just that *Cosmology of Kyoto* makes me feel pretty inadequate, culture-wise. I mean, *yes,* we're the richest, and yes, we're the baddest, and nobody is ever going to touch us in the really important areas, like movies or pizza. Internet access in every bathroom—sure, greatest country in the world—but in the broader sense of cultural mortar, what do we Americans have? Coca-Cola; first on the moon; cow-tipping; Velcro, maybe. Sociocultural Spam. A miserable 3" on the Schlongometer of Civilization.

And—this is the point here—we *like* it that way. We can't name ten presidents in a row, and that's genuinely all right. Start talking about Tecumseh or Sand Creek and

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we develop an overwhelming fascination with our shoes and mumble something hardy about Pioneer Spirit. So the very idea of an interactive trip through the dark underbelly of an entire nation's sociocultural heritage is kinda, well, *creepy* to us. I mean, ask yourself: *Culture*—what is that exactly? That has something to do with skinny champagne glasses and the *nouveau riche* and opera and shit, right? And *society?* As a by god American, you know as well as I do that it's the same thing as *Culture*, except you hafta wear a tuxedo. Kimono. Whatever.

Well you're not getting out of *Cosmology of Kyoto* without learning a little something, even if it's "When confronted with a floating, laughing skull, you fachrissakes *run*." A little background: in Japan, around one-thousand-something A.D., the city of Kyoto (then known by the name of Heiankyo) was the capital and happening burg, full of (societally speaking) Kimonos and opera and shit, and housed one of the most arguably grand civilizations the world has ever known. But while the Heian nobility dreamed by daylight of rebirth in the Pure Land Paradise, it spent its night with one paranoid eye on the void: built by the powerful Emperor Kammu along state-of-the-art geomantic principles as a citadel defended from the vengeful ghosts of rivals he had removed, Kyoto was a city born under a curse, spending its careful days and fearful nights worshiping and placating these spirits, lest the evil mists and cruel demons of the Buddhist hell come creeping through their streets like a miasm. In later centuries, during the rise of the warrior class, the city that was the center of all Japan would slowly decay into a dark, haunted warren of empty streets, old sins and unseen wails of the poor, sick and dying, a real gold-plated Goth turd of a city, mocked by its own former glory, stained by royal corruption, disease, doomed loves, and bloody, jealous revenge.

You begin your *Cosmology of Kyoto* journey by constructing your physical body—the vessel that will carry you through these strange waters of time and memory—with a kind of mix-and-match interface with which you may create an at least arguable facsimile of your corporeal self (body type, eyes, lips, etc.). If you're a Japanese user, this is just one in a series of subtle devices employed to bypass the unspoken Japanese "team" mentality and help you personally experience the city of fact and legend which shaped the soul of an entire nation. Note that I say "If you're a Japanese user." If you're an *American* user this particular feature is going to land you right back in your dog-smelling bedroom with Mr. Potato Head.

Never mind that, though: your first step is to enter Heiankyo and gain exposure to a latticework of historical, religious and cultural references hopelessly beyond your comprehension; for the curious, *Cosmology of Kyoto* has a wonderful Reference Mode feature, allowing players to jump at any time to an online concordance of references, photos of the locales as they appear today, and complete maps of the city's layout and of the principle sites of the era. Don't want to learn anything? Fine, ignore the Reference Feature; but *all* the encounters, personalities met, artifacts and places of residence visited and bizarre occurences are choice bits of Japanese lore, and—while presented in no particular chronological order—serve to give the *feel* of history rather than the timeline. Here is an old woman, chanting at the feet of a statue, urging you to call on the Jizo-Boddhisattva in times of need. Here is a cluster of old men, telling you the tale of Lord Michinaga's great archery match, where he called his first shot, hit dead center, then called his second and split the target in two (you can verify this in the Ref Mode if you doubt). Here is a lean dog feasting on the brains of a human corpse (this is—you unpleasantly discover later—the 'hungry ghost' of Japanese occultism, and there's a little twisted surprise waiting for you here upon which I shan't elaborate). Just remember that those who fail to learn the lesson of history are doomed to repeat its mistakes. (And possibly to get a few red-hot pokers jammed in their eyes.)

Great, great, Hudak, I hear you saying, *I just can't get enough of your lusty take on the Heian era—but what the fuck are you supposed to DO?* The back of the box says it best: "Players take the role of an ordinary human, faced with opportunities, driven by desires, and bound to die." *Cosmology of Kyoto* drops you buck-ass in the wheat field, points you in the direction of Heiankyo, and says "Go." It puts you in hallucinatory situations without *telling* you they're hallucinatory. It binds you to laws without laboriously tabulating those laws (manuals for American video

games would *sicken* many Japanese gamers). And this illustrates a key rift between the American and Japanese ways of doing things—obliqueness, totality, and *subtlety*. Ooop, I can hear you again: *Obliqueness? Subtley? What the hell is this? Get to the point!* There, see?

So obliquely, subtly, you explore the city's many streets. Your goals are fluid. You talk with the townspeople via a conversation interface; you can enter subjects you wish to discuss, but I have no proof at this time that it serves any real function other than as a practical joke on the part of the Yano programmers, the same SOBs whom I am *sure* rigged the cockfights to which I have lost my financial ass. You spend your hard-earned/stolen Yen on beggars, marketplace wares, fish, medicine, weapons—or try your luck with the back-alley cockfights (Grrrr). This much I can tell you: by your works shall you be known. Opposite your Money Meter—Kyoto's wheels are greased just like any others—is a little Karmic Meter.

Which leads us directly to Death. Death, dying, and various unpleasant consequences of dying are all the rage in *Cosmology*. The Yano guys are a real bunch of knee-slappers, I figure. In Buddhism, Redemption is dependent upon Purification. Thus, before you can enter Paradise, you have a number of afterwordly punishments to endure, and this, more than anyplace else, is where *Cosmology of Kyoto* blows the coming-soon-for-Nintendo Series in the bottom of the ninth; the torments of the Buddhist hells (with charming names like Hell of Mass Misery, Hell of Extreme Agony and, the one that worries me the most, the Chamber of Excrement) are gruesome in the extreme—skins ripped off, eyeballs gouged, entrails yanked out for inspection by yanker and yankee, tongues pulled out and nailed to planks and, in one memorable case, pulled out and *eaten*.

From the days of *Satan's Hollow* to today, Hell of one brand or another has popped up in American video games as just another intriguing locale, like the ubiquitous Ice Level in hoppers without number, and that's a scary idea—Hell as alluring setting. *Baaaaaad* shit. But *Cosmology of Kyoto* serves up the nasty, pointless, grinding banality of Hell just the way it should be presented—as a bad, bad show for your own good that you can't leave, can't skip, and have no choice but to watch. And learn, presumably. As a final nasty touch, each time you wind up in Hell, you see yourself there, poised for pain...but *Cosmology of Kyoto* makes *you* start the festivities by clicking the mouse. You'll be seeing a lot of Hell (and quickly, if you play the adventure as a big enough asshole, which is *your* prerogative) before you're done, and even the first would-be paradise you find yourself in crumbles to grays and dirt and noise as the joys of "heaven" fade for the soul that has not yet been made pure. And another thing you won't see in American products—Heaven's supposed to be vintage Corvettes and babes in bikinis, and it's never, *ever* supposed to crumble away. And finally, after your reincarnation, you find your new, purer self standing before the remains of your old, bad self. You take the clothes and, before your eyes, the old corporeal you dissolves like M. Valdemar, with a liquid, nauseating sound that out-Poes Poe because it's not done to freak you out: it's completely, utterly matter-of-fact.

Yeah, yeah, there's sex, too, I'm getting there.

Actually, it's more accurate to say there are "situations of amourous intent." During one particular three-in-the-morning *Cosmology of Kyoto* session, following one of the stories in the *Konjaku Monogatari* (a thousand-year-old monumental anthology of tales, many with Buddhist themes), I was approached by a woman in a kimono, asking me if I was High Steward Okimi (apparently, I was to keep a prearranged 'meeting' with her mistress). So yeah, sure—I lied through my teeth and followed her down the decaying sidestreet to a small dwelling. Inside, in the darkness, I met a beautiful young girl who, smiling behind her hand, demurely invited me to come closer; didn't tell me what for, but, as we say here in the States, *duh*. I remember thinking that if our good friends at Yano were *really* on the ball, I'd be able to put that little pointer on her kimono and *click!* off it would come—and damned if that wasn't *just* what happened.

"Hey, all right!" I yelped, grinning at my monitor. "Check this out!"

"Yeah, great," my girlfriend mumbled from the futon. "I'm going to sleep. Have fun with your little pointer." M2

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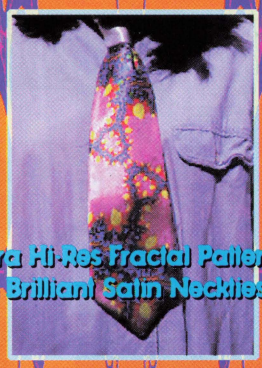

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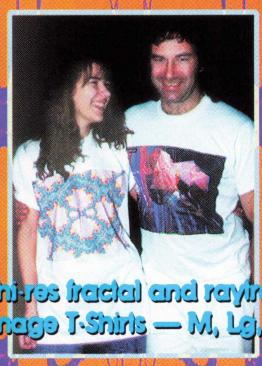

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PROFESSOR KROKER AND HIS RISUS SARDONICUS

BY BRUCE STERLING

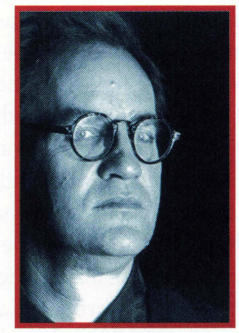

ILLUSTRATION BY JOE SORREN

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[A Book Review]

DATA TRASH: The Theory of the Virtual Class
by Arthur Kroker and Michael A. Weinstein
St. Martin's Press, $16.95

photo by Linda Dawn Hammond

If the 90's began with the election of Clinton-Gore, then 90's postmodernist critique begins with this book. With DATA TRASH, Arthur Kroker finally tackles something as powerfully crazy as he is: the Internet.

Kroker's a nosebleed-postmodernist political science professor from Concordia University in Montreal. He's a very prolific scholar. Throughout the 1980's a series of weird, piercing, Ambrose Bierce-like analyses flowed from the Kroker pen. Exquisitely supercilious, outrageously arrogant. Then there were the innumerable public appearances, edited anthologies, ultra-post-leftist zines, and the occasional shrinkwrapped CD. And who can forget his traveling roadshow *Spasm*, where he dissected of the rotting gravewax of the Paleolithic mummy-on-ice that was Reagan's America?

With the 1992 dissolution of America's deep-frozen Tory Regime, Arthur seemed at a bit of a loss for a few nanoseconds; but Kroker has a set of cultural antennae almost as brilliantly attuned to the scent of hip as Timothy Leary's. Soon UNIX programming manuals joined the unstable heap of Baudrillard, Virilio, and Nietzsche colorfully slumped around Arthur's word processor.

fascinated yet bored

Circa 1994, Arthur Kroker has been around the Net for many months now, and he has highly interesting things to say about virtuality, data highways, mass media, wired culture, the computer industry, and people who own modems. They're not very flattering things. As critique goes, they're not particularly "constructive." Kroker's Swiftian heights of disdain rarely leave much earthly oxygen for the promulgation of a positive political agenda. Or at least they didn't used to. I was stunned to find in DATA TRASH a brief mention of some "substantive human values" that Arthur claims to admire: "aesthetic creativity, social solidarity, democratic discourse, and economic justice." This sudden unwonted outburst of socialist gusto sounds like something printed in THE MASSES circa 1912, and it's so radically unKrokerian that I kinda suspect it must have been snuck into the text by his listed co-author Michael Weinstein.

panicked yet calm

Kroker is a political scientist after all, but a political scientist of a peculiarly disengaged sort. To imagine Arthur Kroker actually in power requires a stretch of the imagination that would make Olaf Stapledon balk. Kroker's a Quebecer, part of an Anglophone ethnic minority in an aggressively Francophone society. Worse yet he lives in Canada, a nation that could politically crack at the sutures almost any minute to become a Disneyfied "NAFTA Canada-lands.® ™" So conceivably Arthur could end up as some kind of Shining Path Abimael Guzman figure for a group of armed Canadian breakaway Amerindian insurgents—you know, digital Amerindians, the kind that have their own satellite dishes and a Fourth World computer-cum-faxmodem networking service...

But I digress. In DATA TRASH: THEORY OF THE VIRTUAL CLASS, Arthur seems to sense that a genuine, brand-new window of sociocultural opportunity has opened up for him, against all odds and expectations. He can sense hot little hands reaching out for him, tentatively but with genuine interest, from the fractal depths of World Wide Web. This book is by far his most accessible work. It even contains a handy "Data Trash Glossary," with almost-comprehensible definitions of such classic Kroker coinages as "bunker state," "crash culture," "liberal-fascism," "recline of the West," and the ever-popular "spasm."

ecstatic yet terminal

If "spasm" is, as Kroker says, "the state of living with absolutely contradictory feelings all the time, and really loving it: fascinated yet bored/panicked yet calm/ecstatic yet terminal/apathetic yet fully committed," then DATA TRASH is the book in which Kroker finally spasms headlong right into the startled midst of his own readership. MONDO readers with modems (is there any other kind?) will be amazed to find themselves simultaneously scorchingly vilified as a powerhungry clique of psychotic virtuality fascists, and weakly defended as the last best hope of cultural solidarity in the face of the commodification leviathans of commercial cyberspace.

DATA TRASH is perhaps the first—obviously not the last—serious work of political analysis to come thrashing along right in the white foamy wake of the computer revolution. What is this monstrous thing that mankind calls "Bill Gates" anyway? Zeus or Charon? Madman or charlatan? Robber-baron greedhead or the only honest counterforce to the Unspeakable Beast that is Perot? Fascist MENSA avatar of the Nietzschean will-to-virtuality, or heroic slayer of pan-capitalist IBM? Righteous hacker geek, or creepy info mogul? Or—the mind boggles—Bill Gates could be all these things at once! The future (it's really weird and novel to see Arthur Kroker seriously addressing the future)—the future may well hinge on the answer!

apathetic yet

Although I'm quoted with approval several times in this book, especially some particularly weird and bizarre stuff that I wrote in the early 80's, I agree with scarcely a single big idea in DATA TRASH. And yet, on a sentence by sentence level, I agree with almost every word in it. There is some truly beautiful writing in this book, inspired rants so round, so firm, so fully packed, so easy on the draw, that they bring tears to my eyes. This book is truly swell. There are even delightful sections in it where Arthur is visibly relaxing, and enjoying himself, and being funny. Like when he's hanging out with a laptop at some hot dog joint in Chicago challenging himself to write a deconstructionist essay of the next thing to appear on television (and he does—and it's great).

fully committed

Personally, I can't wait for the last Marxist to die. If I want to read some genuine upful theorizing, then I'll go sunbathe on the porch and read Kevin Kelly's *Out of Control*. But when the shadows grow deeper, and skeletal hands pull the curtains closed, and the talking heads of CNN glow like gibbous moons in the corner, and the majordomo throws another Branch Davidian on the fire, then my choice is clear: I'll pull my collar up and hunker down under the rusty springs of the couch with a heaping helping of DATA TRASH. M2

Data Trash

The Theory of the Virtual Class
Arthur Kroker
& Michael A. Weinstein

As the world rushes headlong down the information superhighway, few people have taken the time to stop and smell the (virtual) flowers. Arthur Kroker, hailed as "the Marshall McLuhan for the 1990s," thinks the time is right to start counting the road kill. *Data Trash* takes a hard look at our obsession with cyber-culture and our fascination with the disappearance of the human body in virtual reality.

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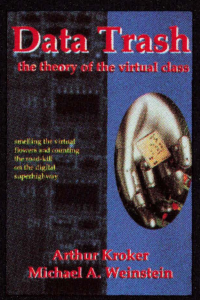

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STREET CREDO

by IAN McDONALD

Illustration by Pat Corrigan, type design by Sean Cavnight

Faiths mutate as the world turns. Fin-de-siècles *call for twisted theologians, and Ian McDonald's the man for the job. In* Terminal Café *(Bantam), the Last Days are at hand and eternal life looks like a shifty proposition. The dead have risen from the tomb and they want your job. High-end handguns scatter the soul. And the info-superhighway is Route 666...*

—PM

The web is. A domain. A potential. A state. A hallucination. An interzone. A defiance of any glib definition. An act of faith. A *credo.*

I believe in the inviolability of mathematics pure, applied and statistical, the creator and sustainer of all knowledge, the sacred language in which the realities of the universe are most truly iterated. And I believe in physics, chemistry, biology, in quantum theory and general relativity and informatics and chaos (though I can't choose between Gödel's Undecidability and Heisenberg's Uncertainty); quarks and gluons and neat unified theory packages tied up with superstring are a few of my favorite things; I believe in the Holy Informational Spirit, the picture in my television, the money in my bank account, the music in my sound system, the friends in my tagalong screen. And I believe in the nanotechnological resurrection of the body, and the life everlasting, Amen.

I believe in them because they work. I do not need to understand how they work, just that they do. The joy of technojuju is that it requires no especial piety or exercise of faith to make it work. Just money. Yahweh may have sent manna with the morning dew to feed the children of Israel, but for that little bit extra, the virtual shopping channels will deliver the milk and honey to your door.

Like all faiths, it is a product of human minds. And minds change; with them, the doctrines of how the world works. Paradigms shift.

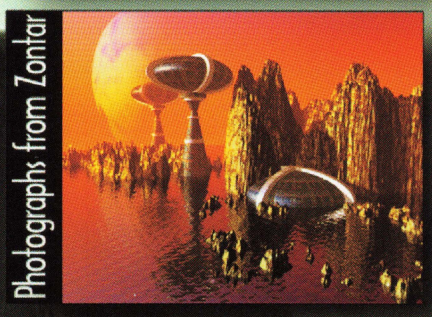
When the big cybernetics *corporadas* failed to produce the Artificial Intelligence it had so long promised, the old Computer Model that Explained Everything from period pains to human consciousness to God in terms of sophisticated digital software and memory systems suffered a massive credibility failure. The street no longer believed that the universe—or even its own self—ran like a very large but essentially reproducible accountancy package. The street put its faith in the Minestrone Universe of the up-and-coming-with-a-bullet Nanotechnological Revolution: an amorphous soup of free-floating conceptual entities which, in their natural collisions, made Prigogenic leaps to higher and higher levels of organization and complexity. A disorganized, downright untidy fractal domain, this new world order, where big fleas not only had little fleas upon their backs to bite 'em, but were in fact made up of little fleas themselves. A cool universe in which agile minds could catch a wave and surf from conceptual rip-curl to rip-curl.

The failure of the cyberneticists was now understood as the difference between trying to reach the moon by Apollo 11 and the Tower of Babel. Wrong material, wrong techniques, wrong approach, wrong wave. The planetary information net they had created was not an embryonic gestalt mind but a primeval ecology analogous to that of planet earth's first few million years; an environment dense with constituent elements in the form of free-circulating shareware, dumped data, viruses dormant and active and clippings and drippings of data-fat from the gigabytes of processing power in motion at any one moment across the worldweb; energy rich, subject to chaotic fluctuations, and approaching a critical mass and complexity out of which an independent, self-sustaining, self-motivating, self-repairing and replicating cybernetic entity—*life*—might precipitate.

By the time the *serafinos* were declared real, actual and, best of all, fashionable, they had accumulated interactive interfaces (*personalities*) garnered from a gamut of sources and inspirations: the great Golden Age archetypes were particular favorites, though with bizarre outgrowths grated onto the core personalities. The top half of Marilyn Monroe, floating on the data-winds, skirts eternally billowing upward. At least fifteen Humphrey Bogarts, all engaged in bitter internecine webwar to be the sole claimant of the lipcurl and two-fisted drawl. A Marlon Brando intimately fused with a surprisingly well hung Harley-Davidson.

And a drag-queen Carmen Miranda. M2

Images by Eric Wenger, P. Lessing & Kai Krause



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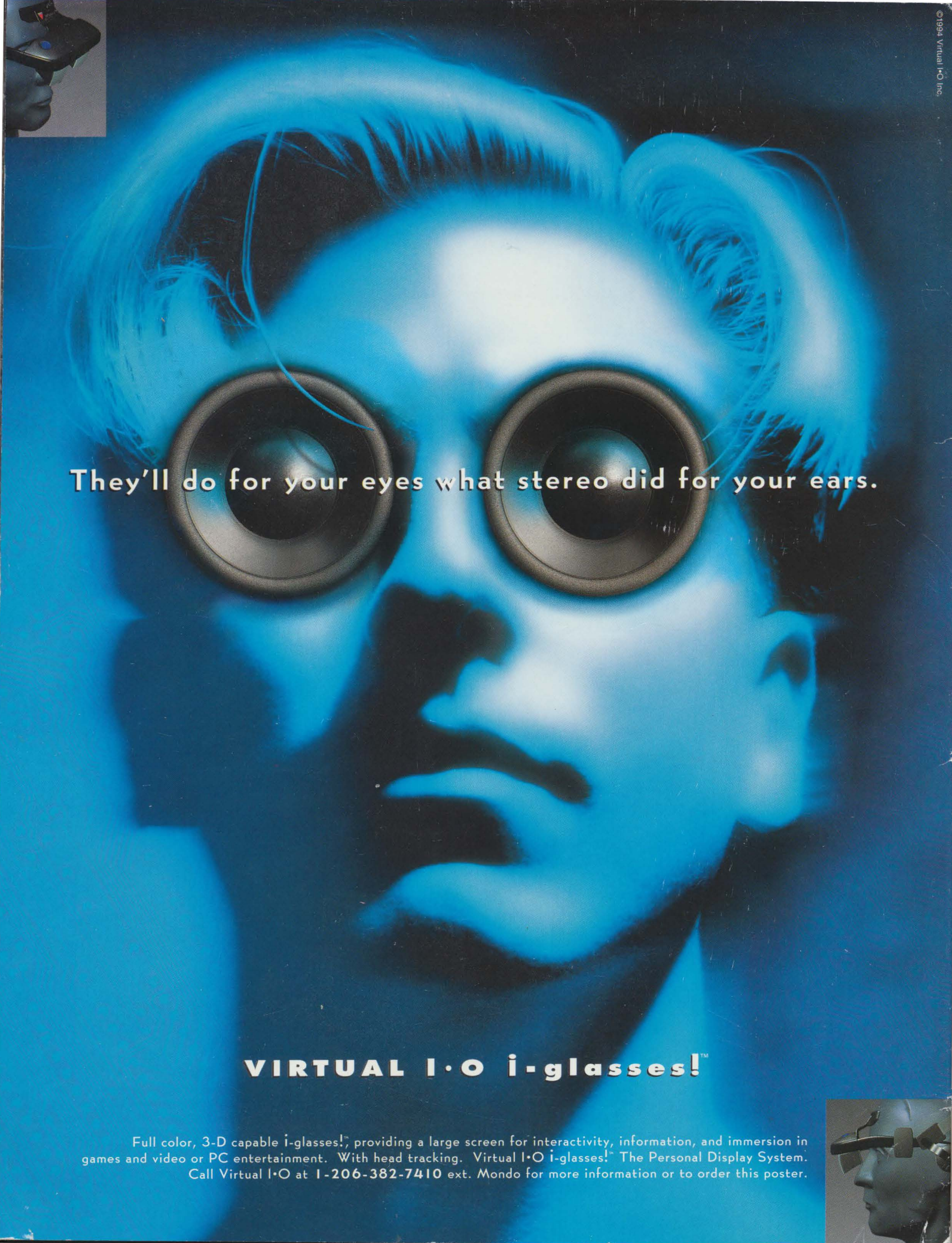
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